

Exploring OpenCPN V5

Subjects

- FIND THE MANUAL: not always obvious
- ADD CHARTS: need to see where you are
- CHART GROUPS: a bit of housekeeping/organizing
- PROGRAM SETTINGS: (GPS, Change COM Ports, Depth Units)
- ROUTES: create, save, change and display
 - LOCK WAYPOINTS: avoid 'finger farts'
- TRACKS: create, save and display
- ANCHORAGES: save and display
- LAYERS: create and display
- PLUGINS: enhancements that add to the experience

Version 5.0 (1 Nov 19)

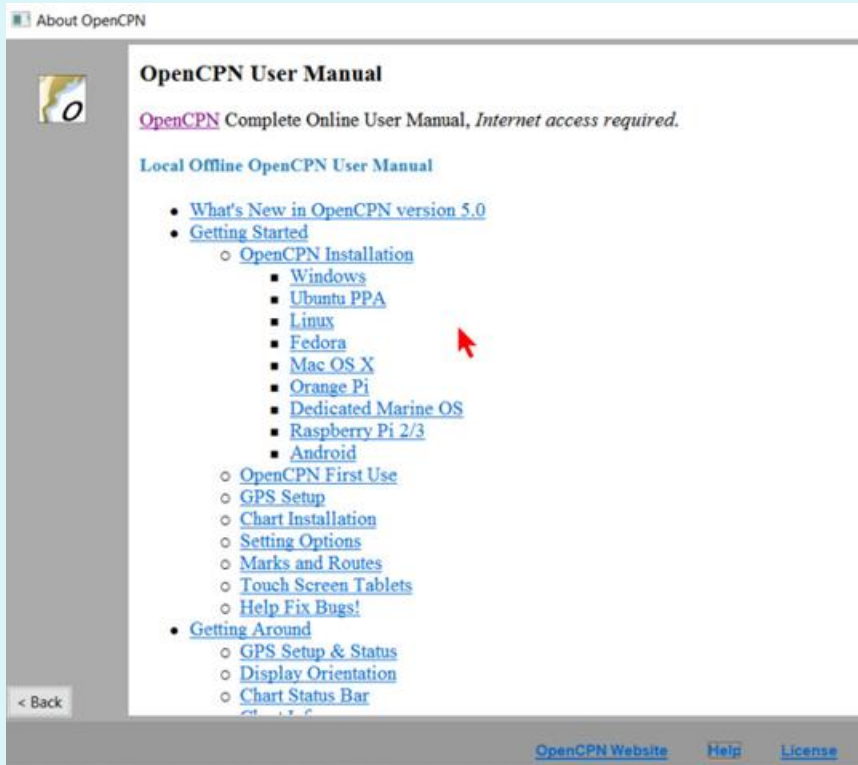
FIND THE MANUAL

On the Tool Bar click on the icon with the '?' mark. Next click on the 'Help' link.



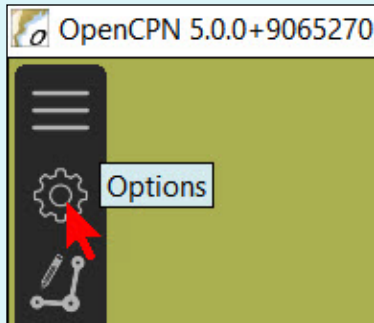
FIND THE MANUAL

The Embedded Manual opens. Note that you do not have to be online. This manual opens from within your computer browser (Firefox, Microsoft Edge, etc.)

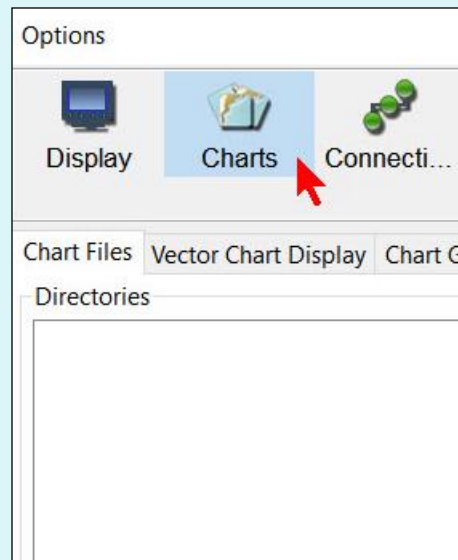


If this is your first time to be using Version 5 of the OpenCPN program, have a read of 'What's New in OpenCPN Version 5.0'

ADD CHARTS



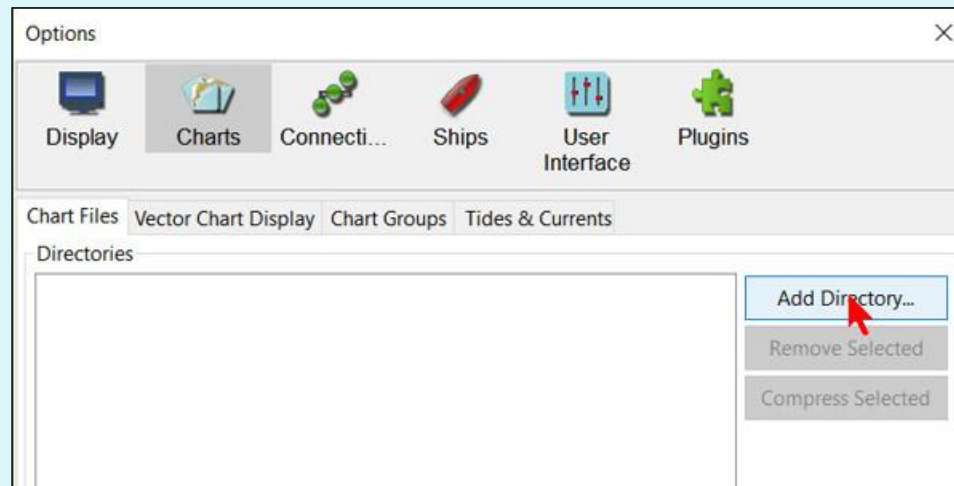
On the Tool Bar click on 'Options' (the 'gear') to display this page shown below



Click on 'Charts'

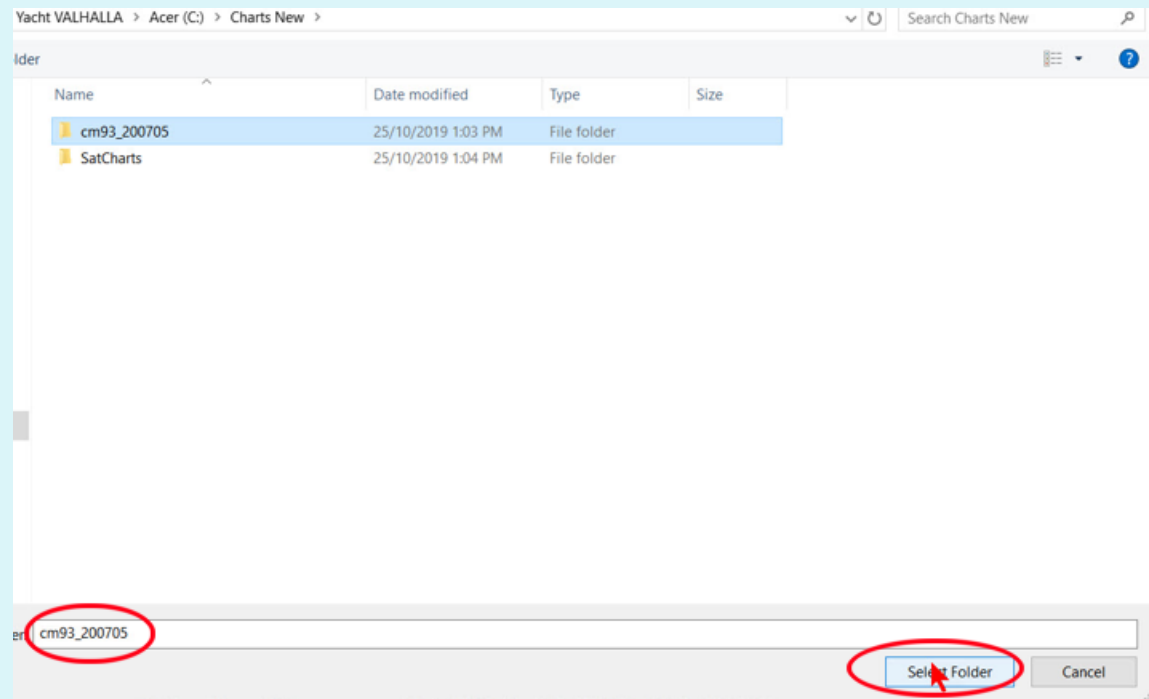
ADD CHARTS

Click on 'Add Directory ...'



ADD CHARTS

Navigate to where you have charts stored on your computer. Select the chart folder you want to add (in this case the cm93 vector charts). Click on 'Select Folder'

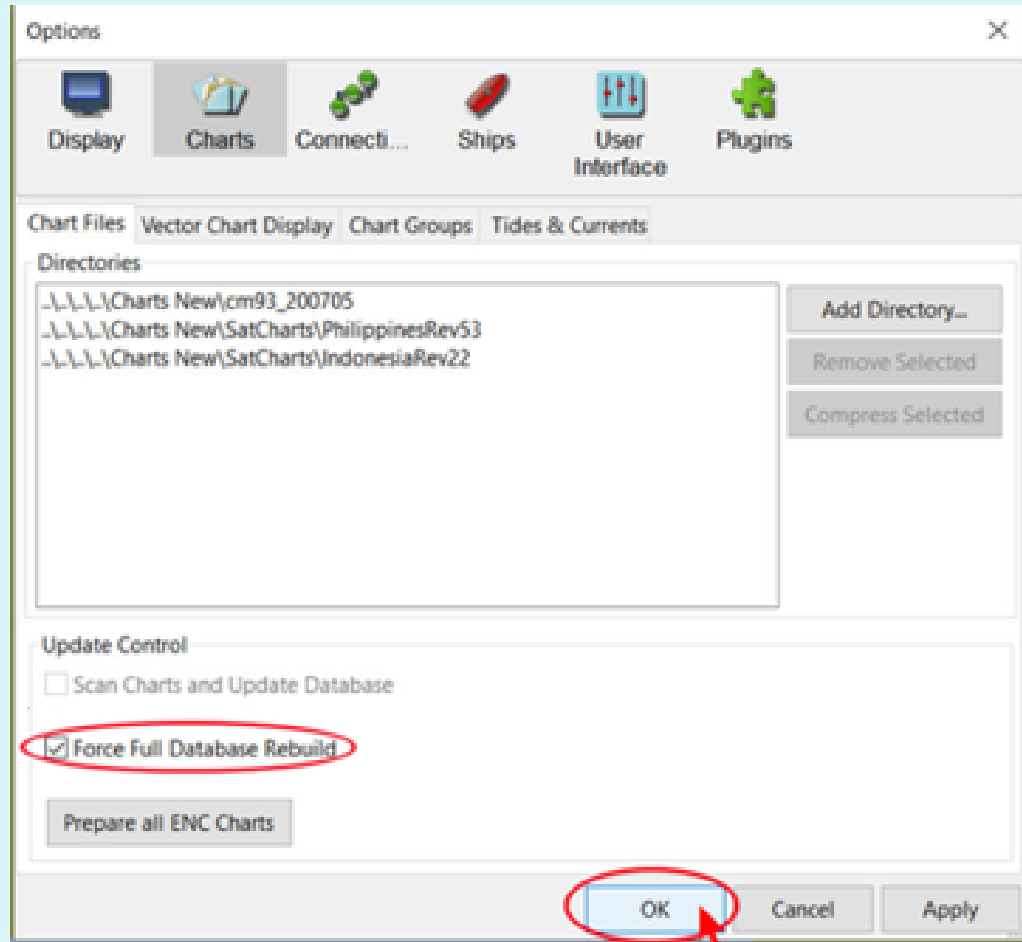


ADD CHARTS

Select the other charts you want to add. In this case I have selected satellite imagery charts (SatCharts) of the Philippines and of Indonesia.

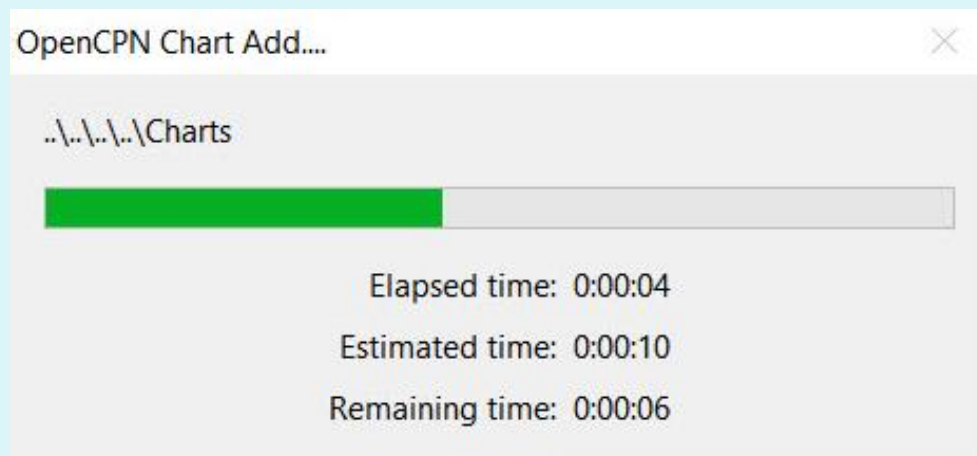
Check the box 'Force Full Database Rebuild' and click 'OK' which closes the screen.

(Checking 'Apply' leaves this screen open)



ADD CHARTS

Wait while the database is updated.



ADD CHARTS

The overlay charts are shown by the small red outlines.

To avoid slowing down the computer it is good to have 'Chart Groups'



CHART GROUPS

On the 'Options/Charts/Chart Groups' page, click on 'New Group ...'

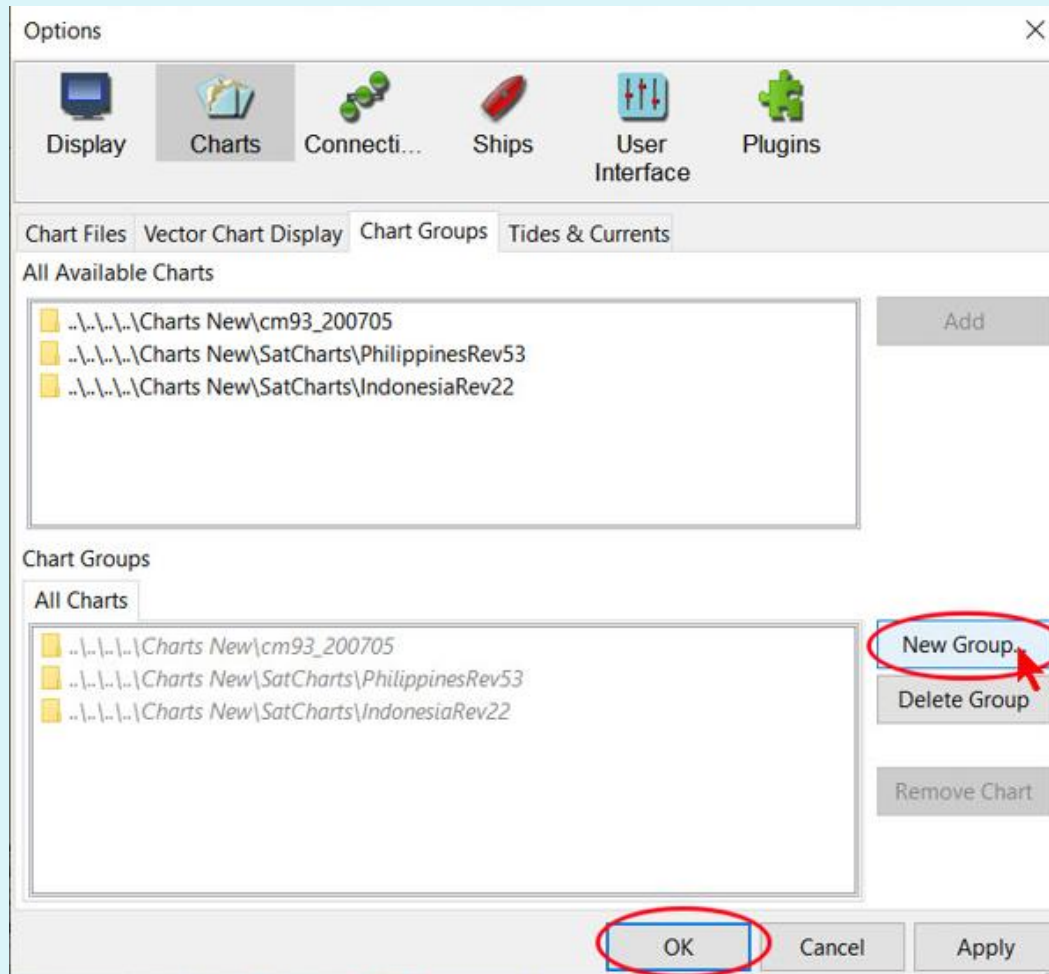
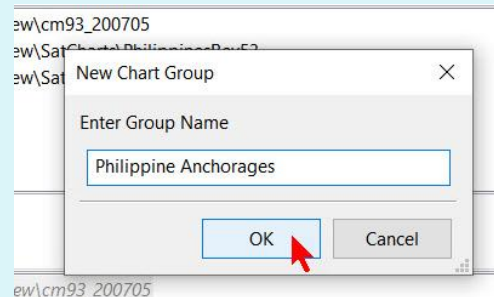


CHART GROUPS

Enter a name for the group
and click 'OK'



Highlight the charts to be
added to this group, one by one,
and click on 'Add'.

I recommend adding the
Cm93 charts to each group.

The selected charts appear
in the group.

For the next group
click on 'New Group ..'

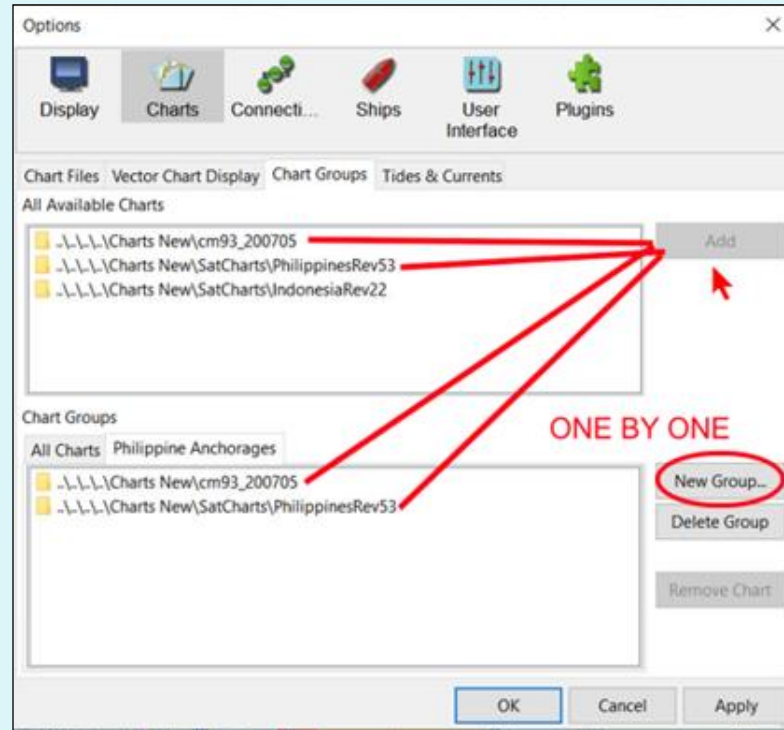


CHART GROUPS

Here the second group for Indonesia charts has been created. Click on 'OK'

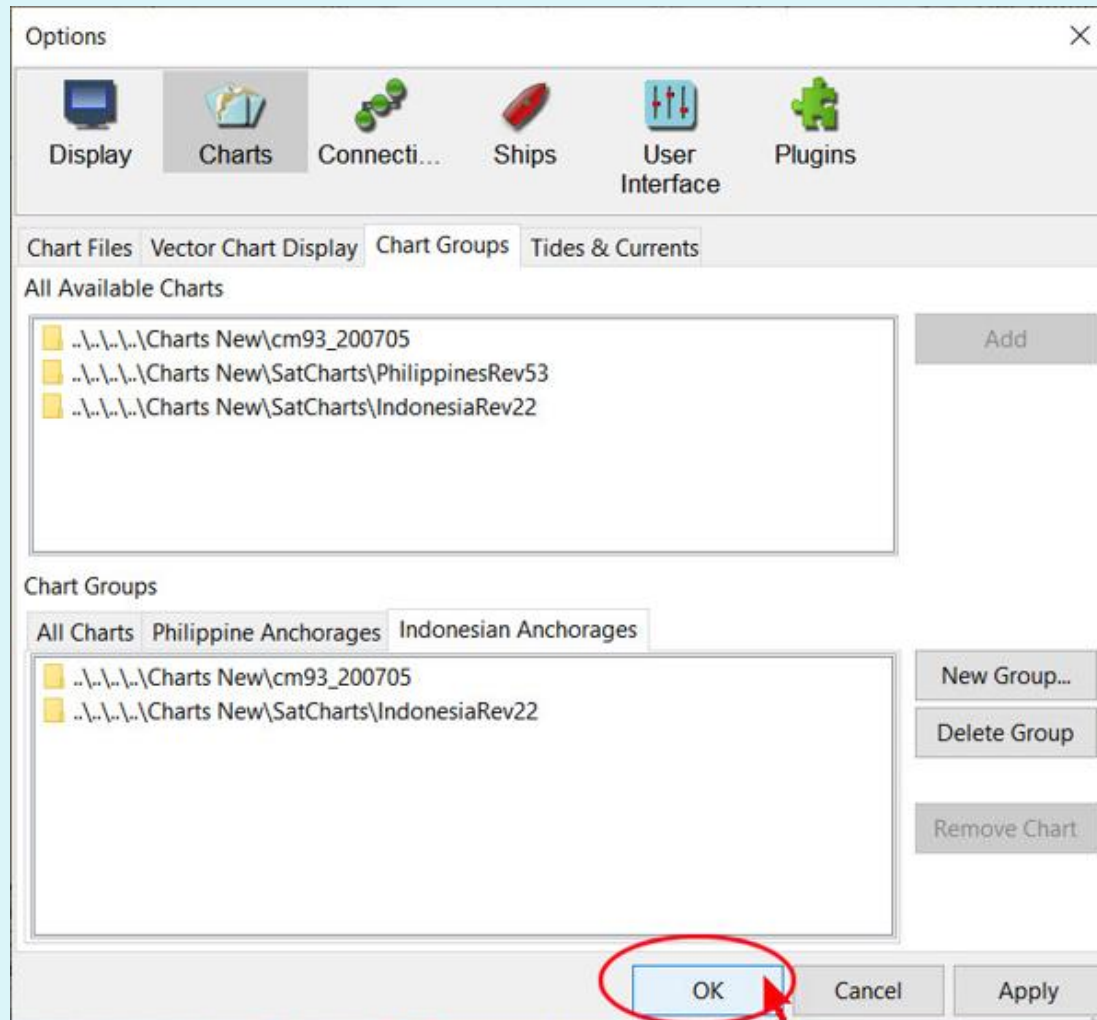


CHART GROUPS

To display a desired chart group, right-click on the OpenCPN screen and click on 'Chart Groups' then click on the one you want to be displayed e.g. Philippine Anchorages.



CHART GROUPS

The Indonesian charts are not displayed. They will not be moved to slow down the computer but are available at any time for display by right-clicking.

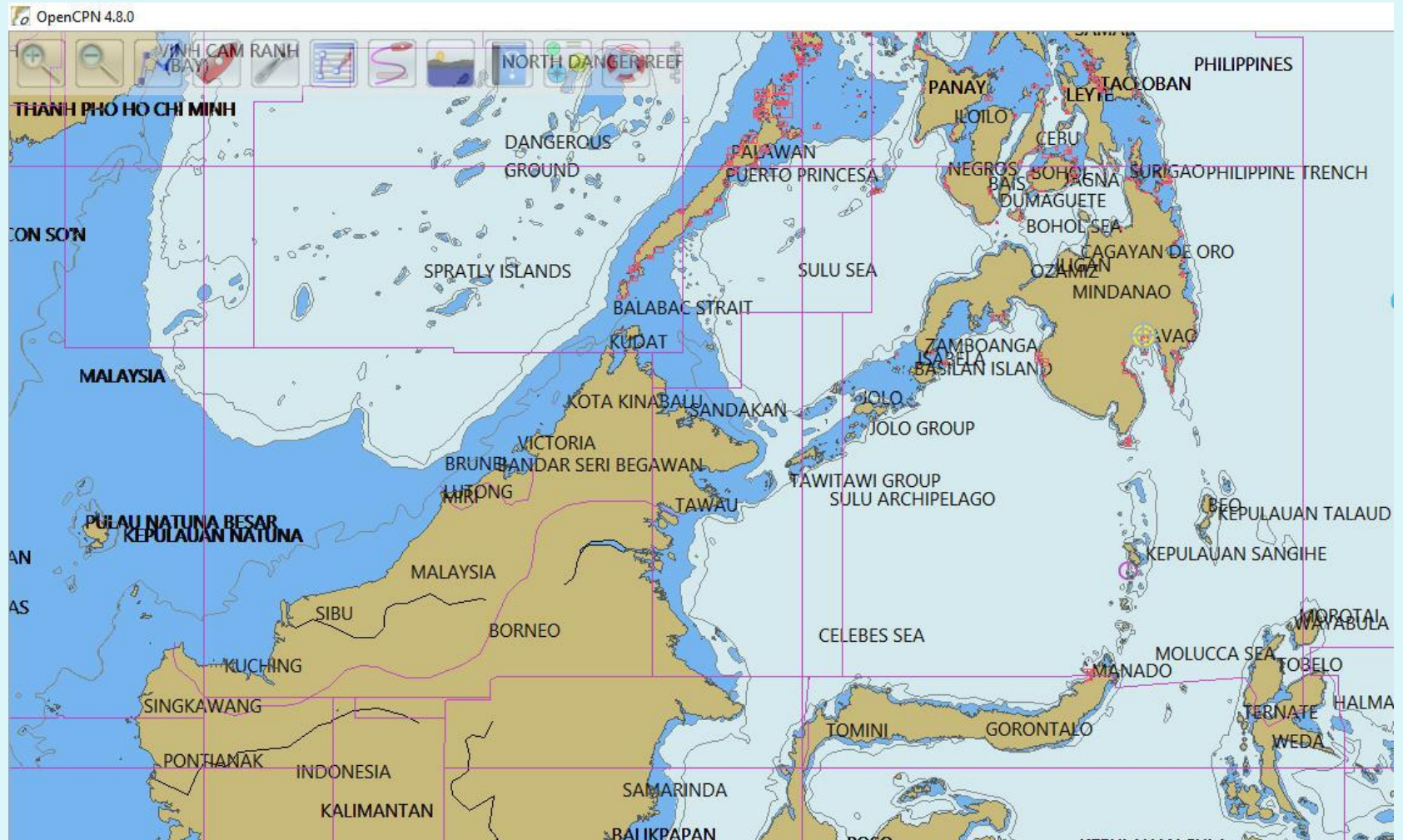


CHART GROUPS

Shortcuts

A convenient feature to switch between chart groups is to use the number keys as shortcuts to the chart groups.

‘0’ displays all active charts.

‘1’ displays the first chart group that was created.

‘2’ displays the second chart group that was created.

‘etc’

PROGRAM SETTINGS

GPS

GPS Installation & Connection

When OpenCPN is first installed, there are no connections to a device to provide position, course and speed information to the program. To obtain this needed information for use underway it is necessary to obtain a GPS signal from an external device such as a fixed or handheld GPS or some other device such as an AIS receiver or transceiver which has the data available.

PROGRAM SETTINGS

GPS

A COM Port is usually used though other connections such as Bluetooth and network connections can be used as well. I will describe using an external 'hockey puck' USB GPS which is reasonably priced and does an excellent job as long as it has a view of the sky and not inhibited by the vessel construction (such as metal whereas FRG is OK)

PROGRAM SETTINGS

GPS

For this example I've picked the Globalsat BU-353S4.



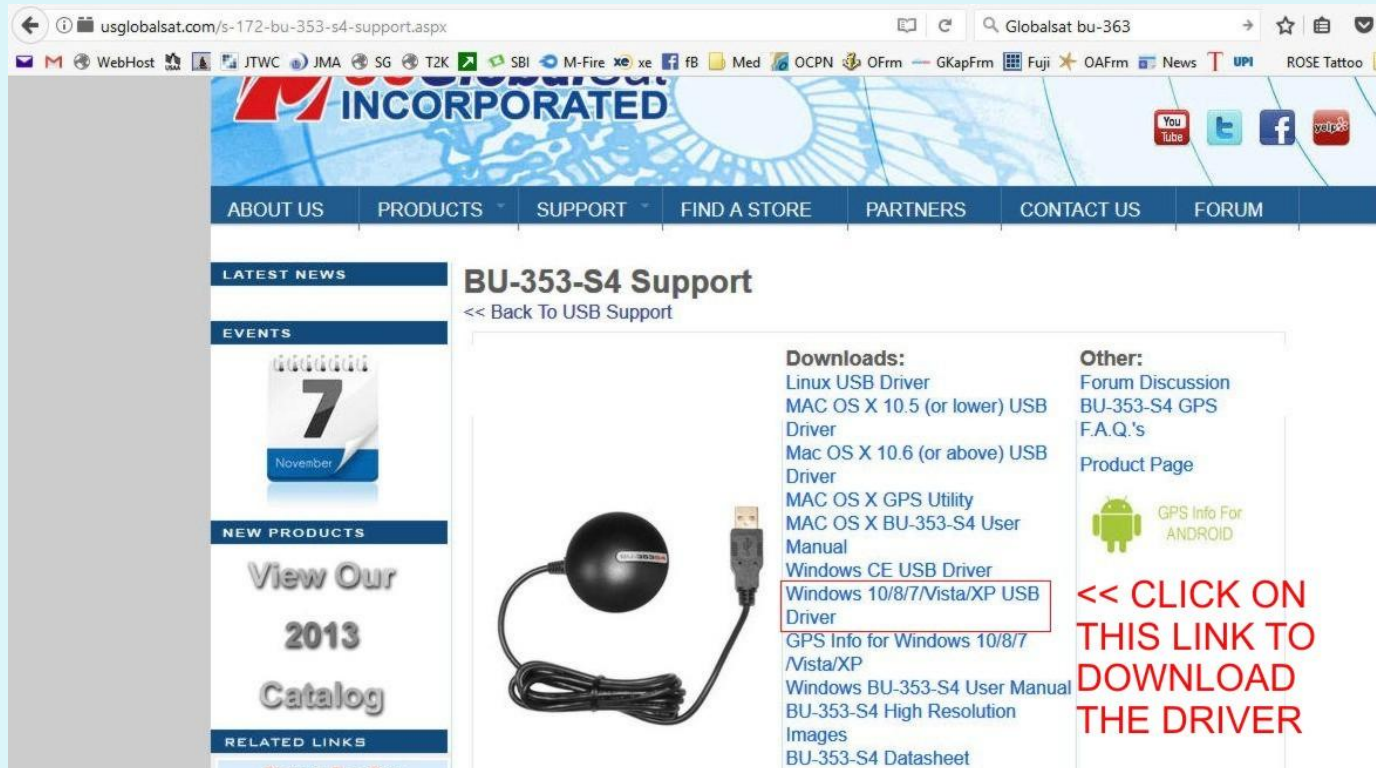
Although an optical disk with drivers comes with the GPS, I recommend you download the latest driver from the GPS support website, in this case:

<http://usglobalsat.com/s-172-bu-353-s4-support.aspx>

PROGRAM SETTINGS

GPS

From this website you can download the latest driver for several operating systems. In this example I am using Windows 10.



usglobalsat.com/s-172-bu-353-s4-support.aspx

Globalsat bu-363

ABOUT US PRODUCTS SUPPORT FIND A STORE PARTNERS CONTACT US FORUM

BU-353-S4 Support
<< Back To USB Support

Downloads:
Linux USB Driver
MAC OS X 10.5 (or lower) USB Driver
Mac OS X 10.6 (or above) USB Driver
MAC OS X GPS Utility
MAC OS X BU-353-S4 User Manual
Windows CE USB Driver
Windows 10/8/7/Vista/XP USB Driver
GPS Info for Windows 10/8/7/Vista/XP
Windows BU-353-S4 User Manual
BU-353-S4 High Resolution Images
BU-353-S4 Datasheet

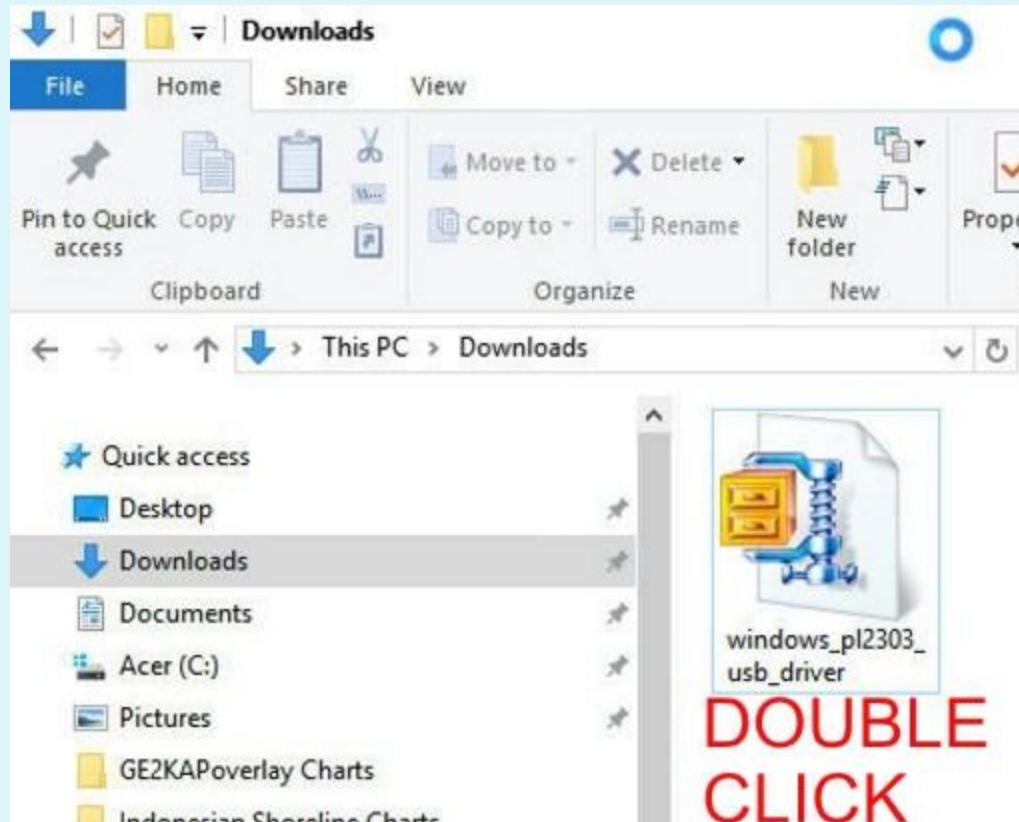
Other:
Forum Discussion
BU-353-S4 GPS F.A.Q.'s
Product Page
GPS Info For ANDROID

<< CLICK ON THIS LINK TO DOWNLOAD THE DRIVER

PROGRAM SETTINGS

GPS

Navigate to the Downloads folder on the computer and double-click on the downloaded compressed file.



PROGRAM SETTINGS

GPS

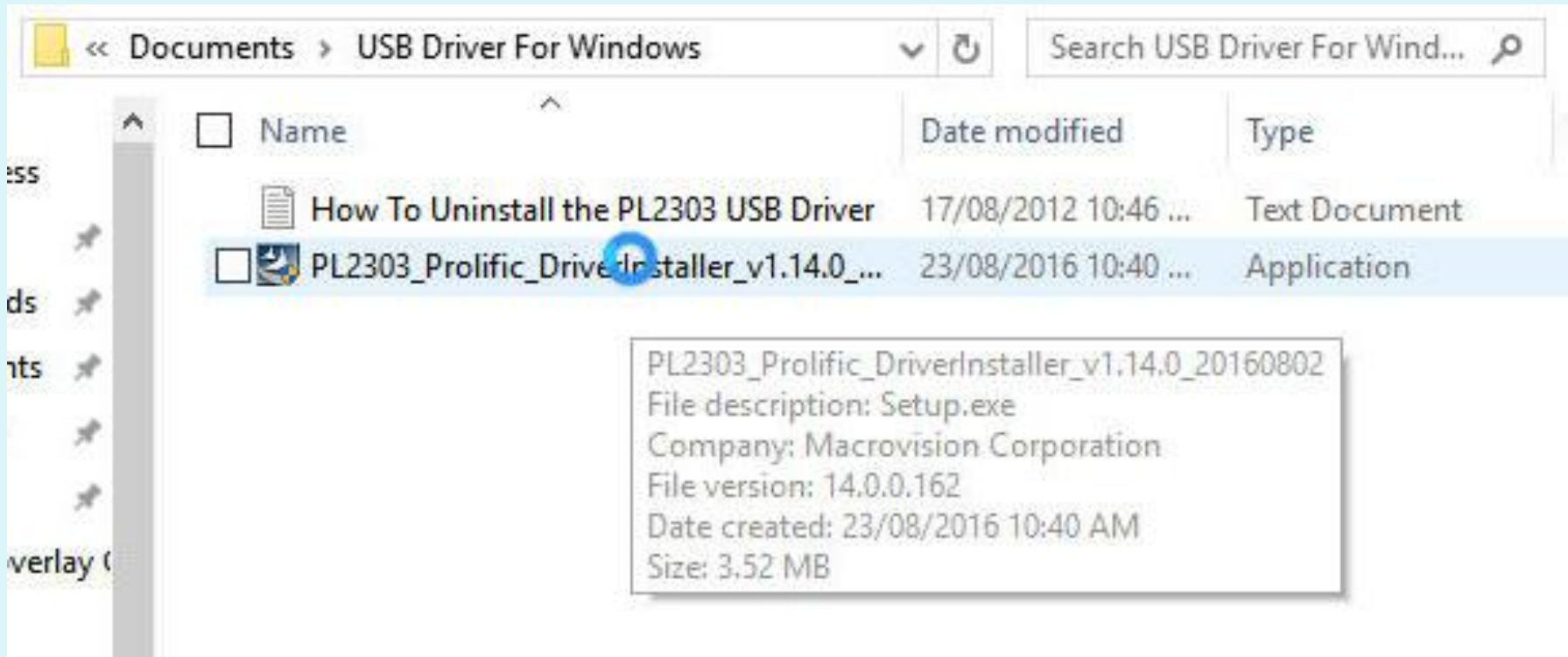
Uncompress and save to a convenient location. In this case I have extracted to the Documents folder on the computer. The folder name is 'USB Driver For Windows'



PROGRAM SETTINGS

GPS

Navigate to where it was saved, open the folder and launch the installer (double-click). Follow the prompts to the 'Finish' and the driver will be installed



PROGRAM SETTINGS

GPS

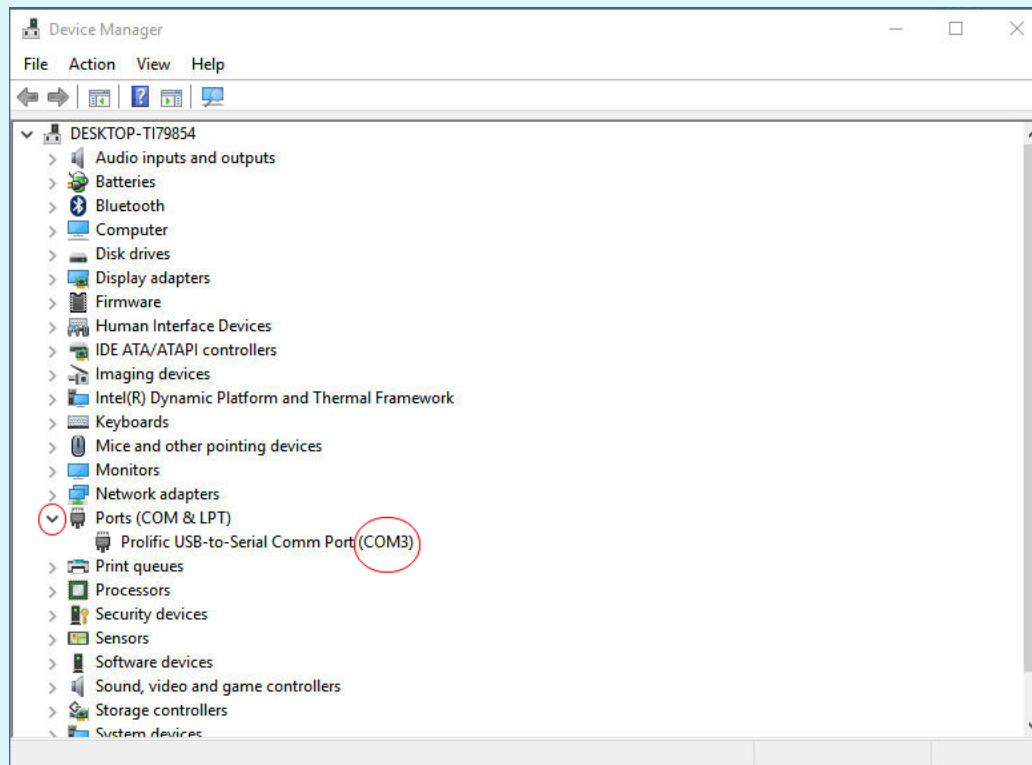
FINDING THE COM PORT NUMBER

The computer has the driver ready to be associated with the COM ports on the machine. When you insert the GPS into a USB port, a COM Port number will be assigned by the computer. You will need to know this number when linking the GPS to OpenCPN.

PROGRAM SETTINGS

GPS

Insert the GPS into any USB port. Go to the **Device Manager** on the computer. Click on the '>' to the left of the entry 'Ports (COM & LPT)'. Note the GPS in this USB port is assigned 'COM3'



PROGRAM SETTINGS

GPS

How do I know if the GPS is ON?

Your USB GPS must be plugged into your laptop's USB port to get power. If your PC is on and the COM port was configured properly, the GPS receiver is on and receiving the streaming GPS data. In addition the Globalsat USB GPS has a built-in LED status indicator that shows the following:

LED OFF:

GPS receiver is off (no power).

LED ON

(solid): No fix, searching for GPS signals.

LED FLASHING:

Position fix established and GPS signals are being received.

PROGRAM SETTINGS

GPS

OpenCPN CONNECTION

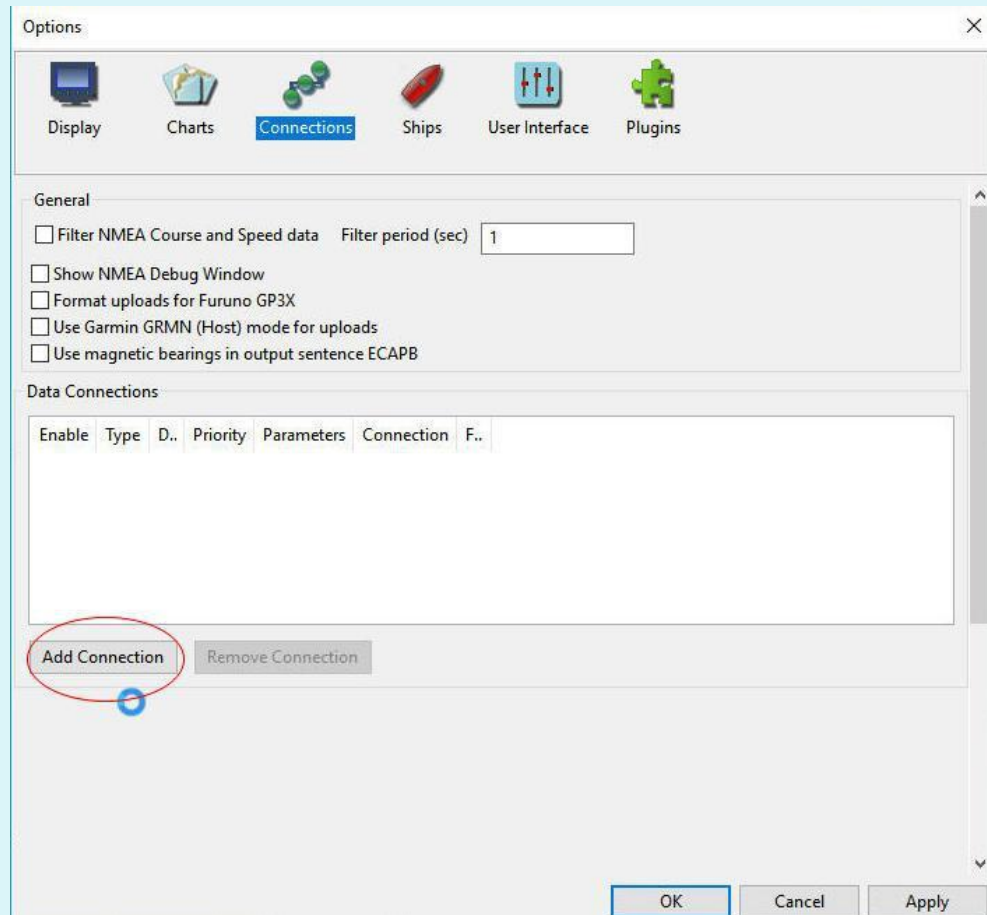
With the GPS installed in the computer's USB and receiving a position (Red LED is blinking)
it's now time to connect it to OpenCPN

PROGRAM SETTINGS

GPS

Launch OpenCPN

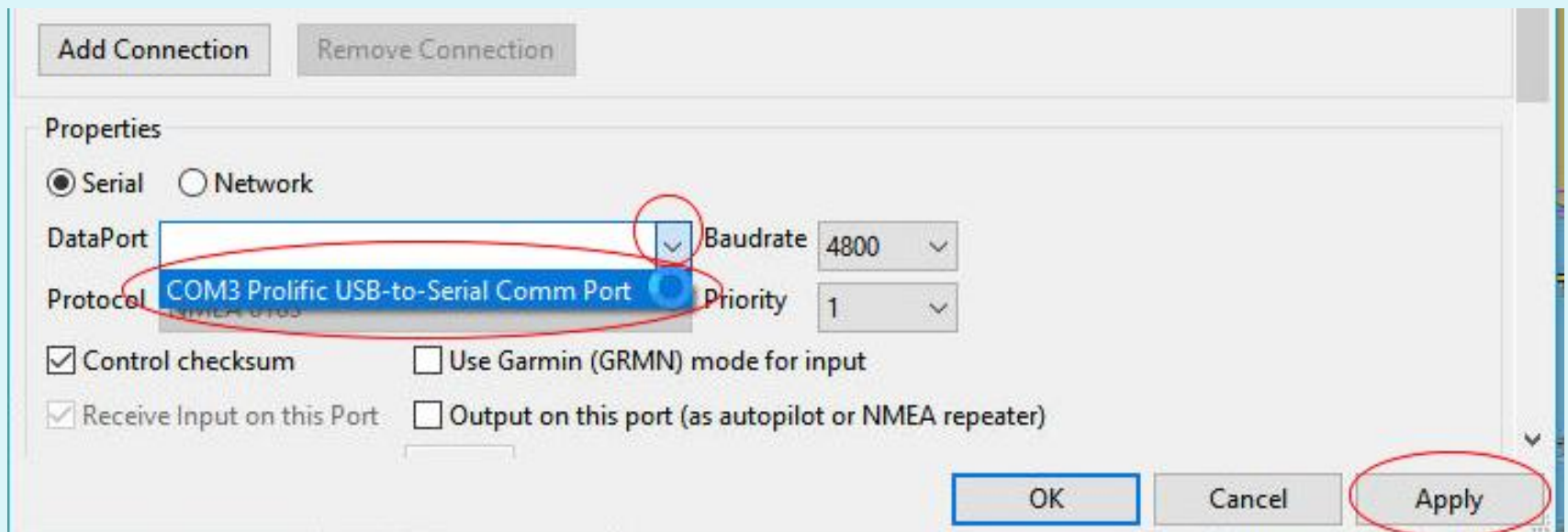
In Options/Connections click on 'Add Connection'



PROGRAM SETTINGS

GPS

Click on the elevator to reveal the installed GPS at COM3. Success! Click on the highlighted text then click on 'Apply'



The screenshot shows a 'GPS' settings window. At the top are 'Add Connection' and 'Remove Connection' buttons. Below is a 'Properties' section with 'Serial' selected. The 'DataPort' field is empty, and the 'Protocol' dropdown is open, showing 'COM3 Prolific USB-to-Serial Comm Port' highlighted in blue. A red circle highlights the 'COM3 Prolific USB-to-Serial Comm Port' text. Another red circle highlights the dropdown arrow. To the right, 'Baudrate' is set to 4800 and 'Priority' is set to 1. At the bottom, there are checkboxes for 'Control checksum', 'Receive Input on this Port', 'Use Garmin (GRMN) mode for input', and 'Output on this port (as autopilot or NMEA repeater)'. The 'OK', 'Cancel', and 'Apply' buttons are at the bottom right, with 'Apply' circled in red.

Add Connection Remove Connection

Properties

☒ Serial ☐ Network

DataPort

Protocol **COM3 Prolific USB-to-Serial Comm Port**

Baudrate 4800

Priority 1

☒ Control checksum ☐ Use Garmin (GRMN) mode for input

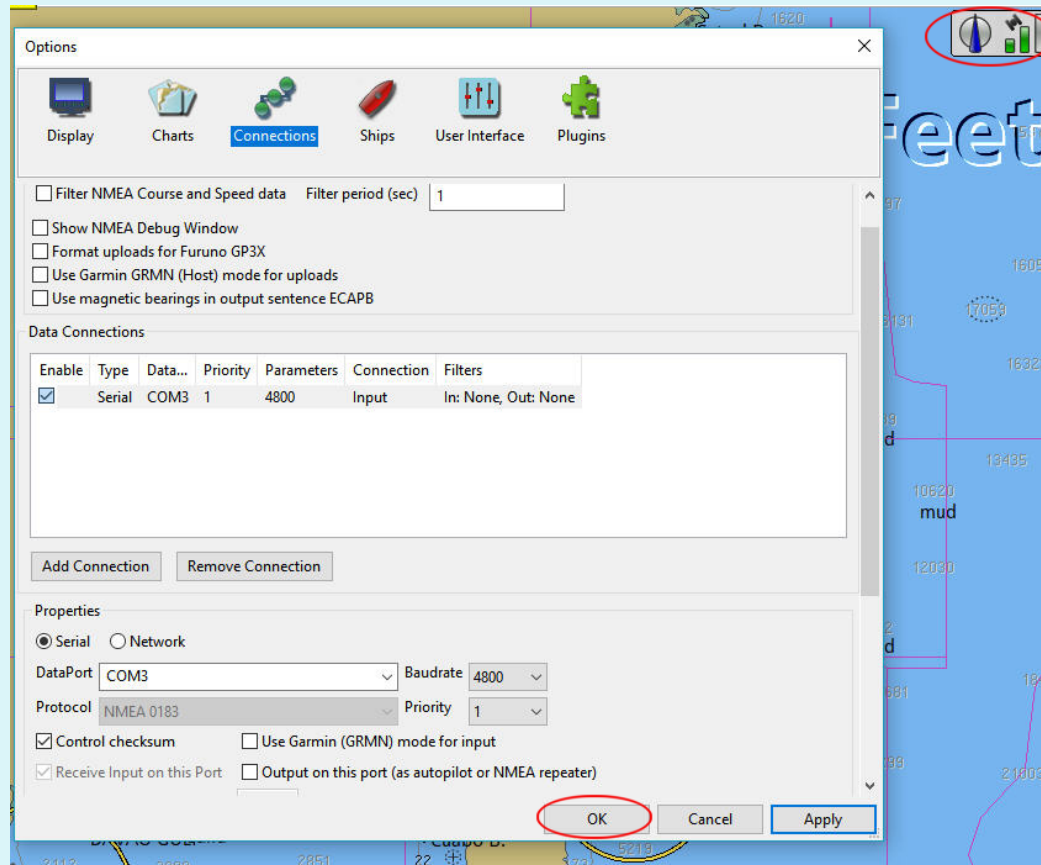
☒ Receive Input on this Port ☐ Output on this port (as autopilot or NMEA repeater)

OK Cancel Apply

PROGRAM SETTINGS

GPS

The Options screen shows that COM3 has been enabled and the green bars in the upper right hand corner show a position has been received



PROGRAM SETTINGS

GPS

As a further check you can select the 'Show NMEA Debug Window' box. The incoming NMEA data will scroll up the DeBug window.

The image shows two overlapping windows from a software application. The background window is the 'NMEA Debug Window', which displays a list of NMEA sentences received from a serial port (COM3). The sentences include \$GPRMC, \$GPGLA, \$GPGSA, \$GPGSV, and \$GPRMC. Below the list is a 'Filter' input field and a 'Legend' section with five colored boxes: green for 'Message accepted', orange for 'Input message filtered, output message filtered and dropped', purple for 'Input Message filtered and dropped', blue for 'Output Message', and red for 'Information Message or Message with errors'.

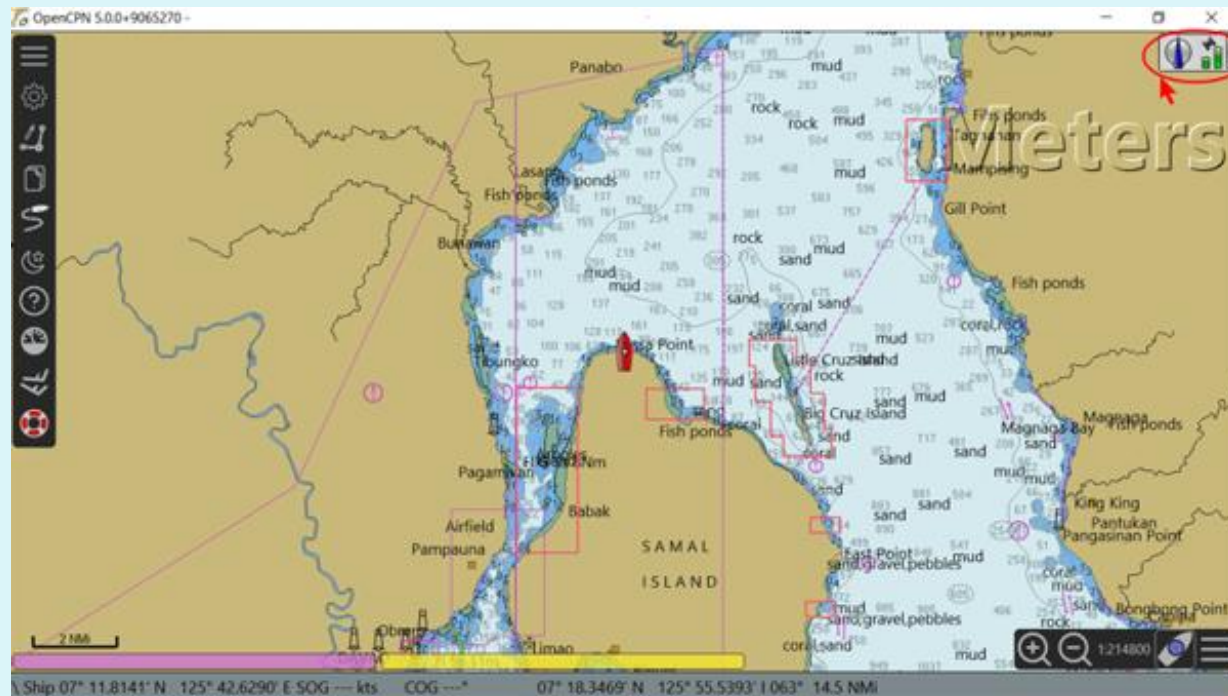
The foreground window is the 'Options' dialog box. It has a tabbed interface with icons for 'Display', 'Charts', 'Connections' (which is selected), 'Ships', 'User Interface', and 'Plugins'. Below the tabs are several checkboxes: 'Filter NMEA Course and Speed data' (unchecked), 'Show NMEA Debug Window' (checked and circled in red), 'Format uploads for Furuno GP3X' (unchecked), 'Use Garmin GRMN (Host) mode for uploads' (unchecked), and 'Use magnetic bearings in output sentence ECAPB' (unchecked). There is also a 'Filter period (sec)' field set to '1'. At the bottom is a 'Data Connections' table.

Enable	Type	Data...	Priority	Parameters	Connection	Filters
<input checked="" type="checkbox"/>	Serial	COM3	1	4800	Input	In: None, Out: None

PROGRAM SETTINGS

GPS

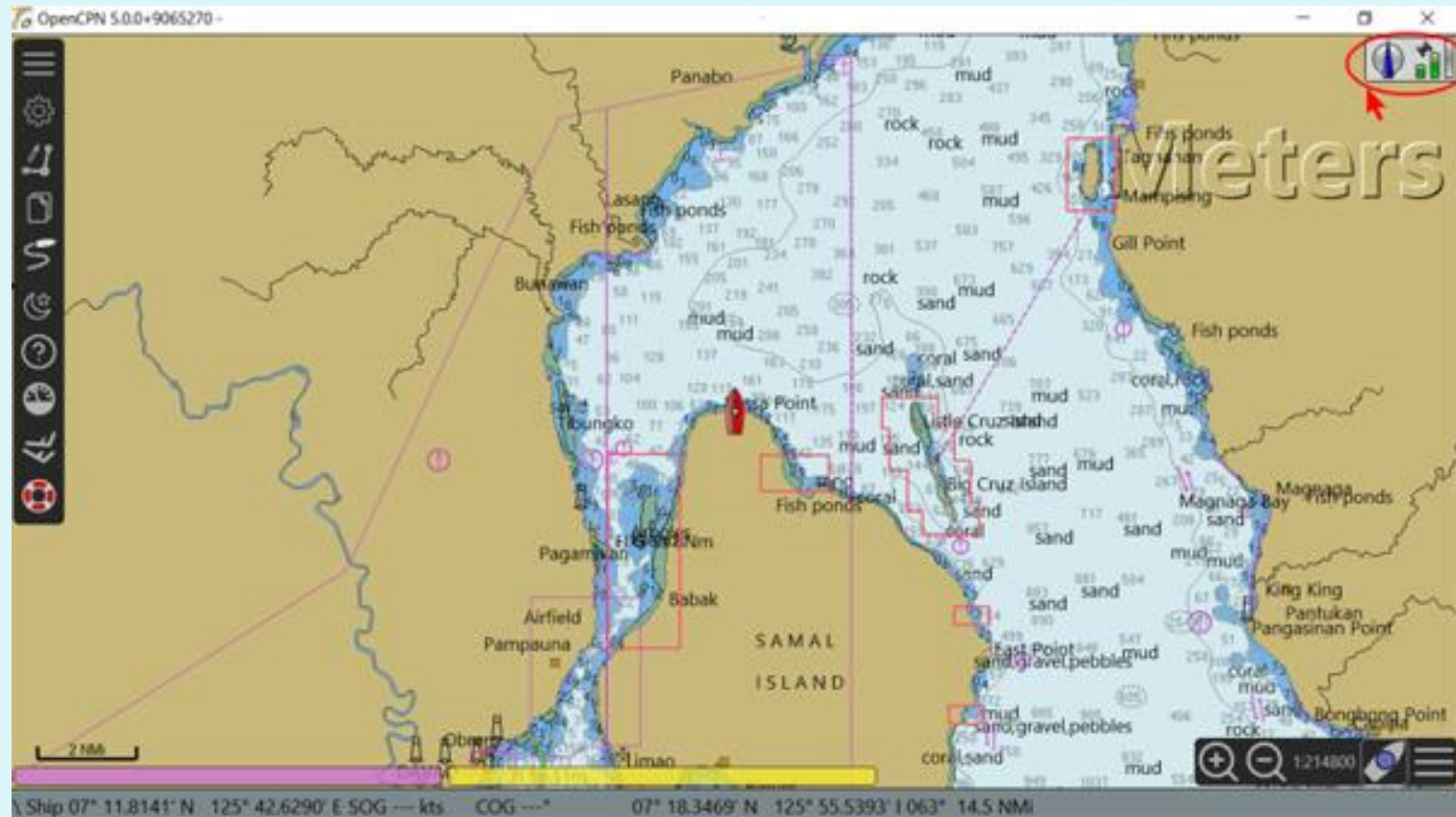
Uncheck the 'Show NMEA Debug Window' box and click on 'OK' to return to the OpenCPN screen



PROGRAM SETTINGS

GPS

On the OpenCPN screen the GPS will be seen as green bars in the upper right hand corner and the boat icon will be red in color.



PROGRAM SETTINGS

GPS

CHANGE GPS COM PORT NUMBER

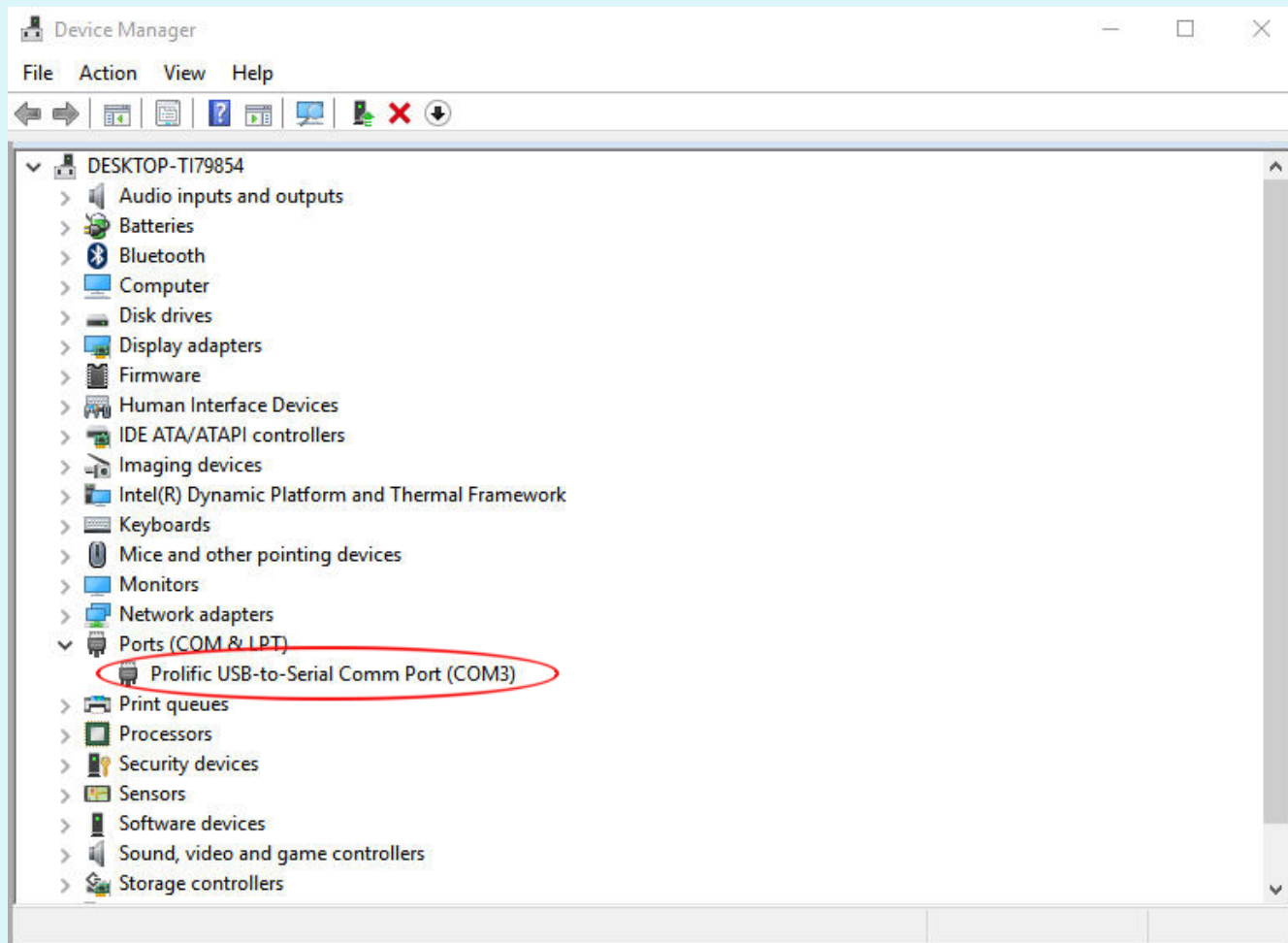
When the GPS is inserted into a USB port the computer assigns a COM port number based on some internal rules. With multiple USB ports the number can be different for each port used.

If, for convenience, you want a particular COM port number to be assigned and/or all USB ports to have the same number the **Device Manager** is used to make these assignments.

PROGRAM SETTINGS

GPS

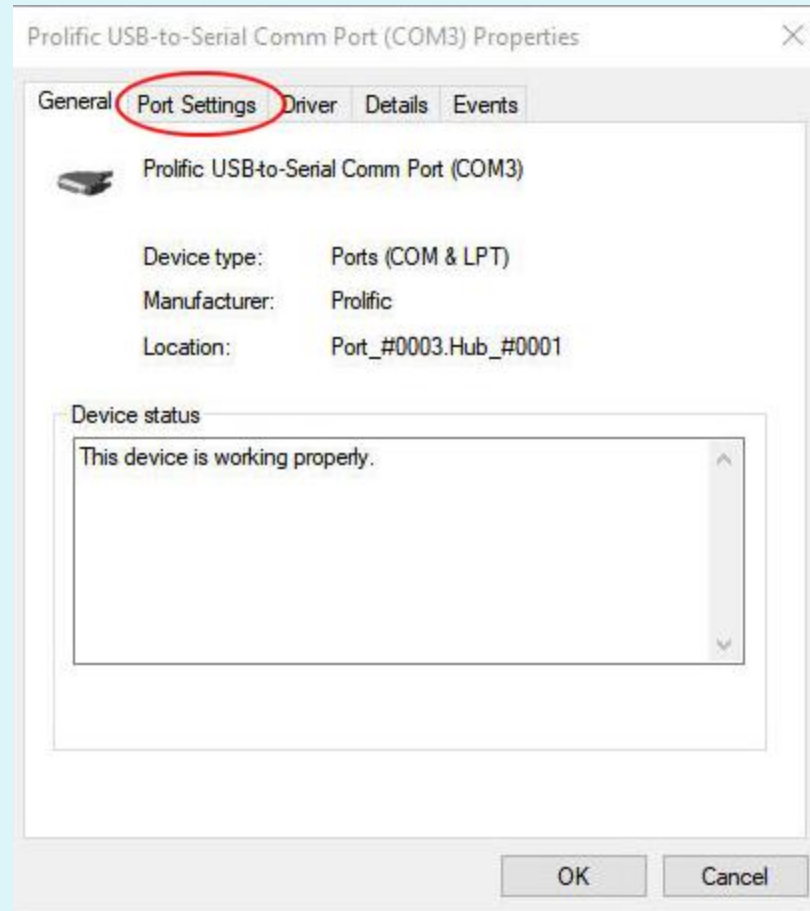
Display the COM port assignment and right-click on it.



PROGRAM SETTINGS

GPS

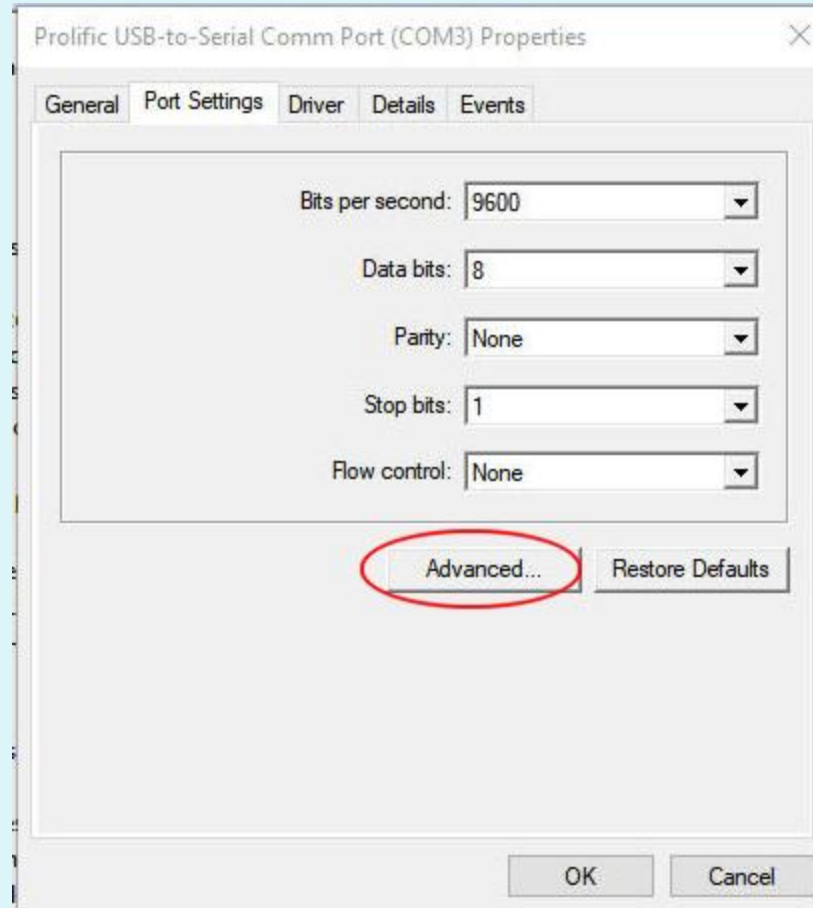
Click on the 'Port Settings' tab.



PROGRAM SETTINGS

GPS

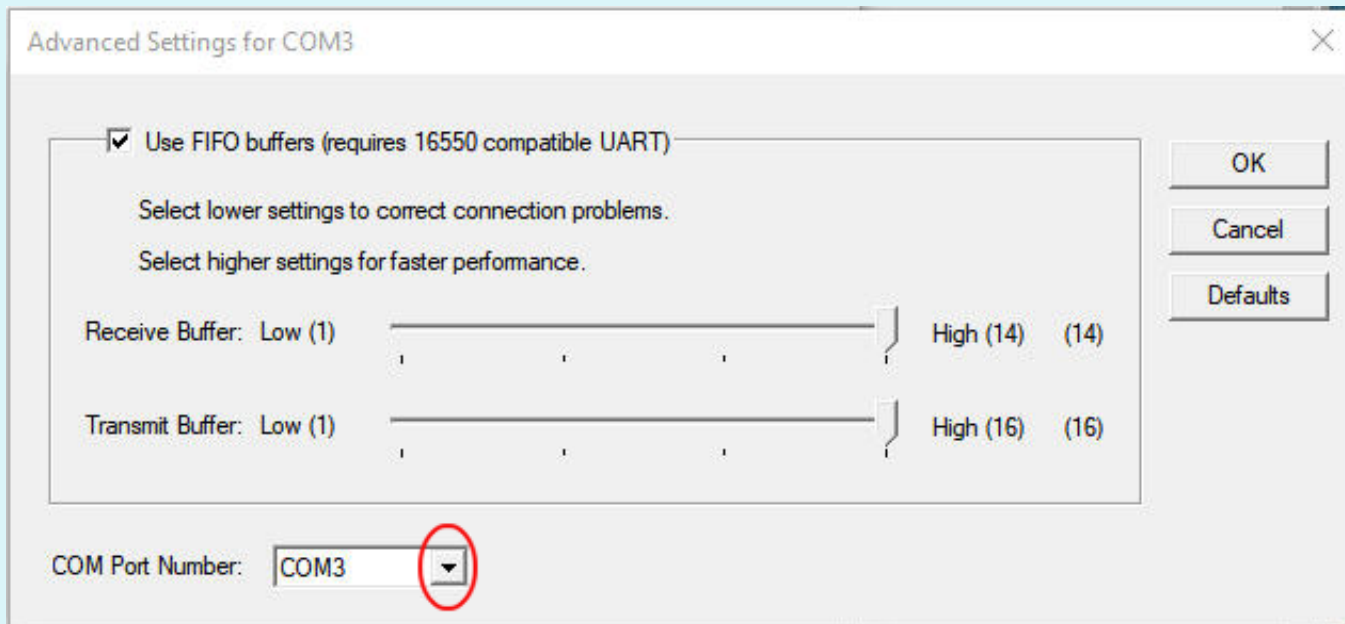
Click on the 'Advanced' button



PROGRAM SETTINGS

GPS

Click on the 'COM Port Number' elevator



PROGRAM SETTINGS

GPS

From the elevator select the desired COM port number (in this case COM1) and click 'OK'

Advanced Settings for COM3

☒ Use FIFO buffers (requires 16550 compatible UART)

Select lower settings to correct connection problems.
Select higher settings for faster performance.

Receive Buffer: Low (1) High (14) (14)

Transmit Buffer: Low (1) High (16) (16)

COM Port Number: COM1 ▼

OK
Cancel
Defaults

PROGRAM SETTINGS

GPS

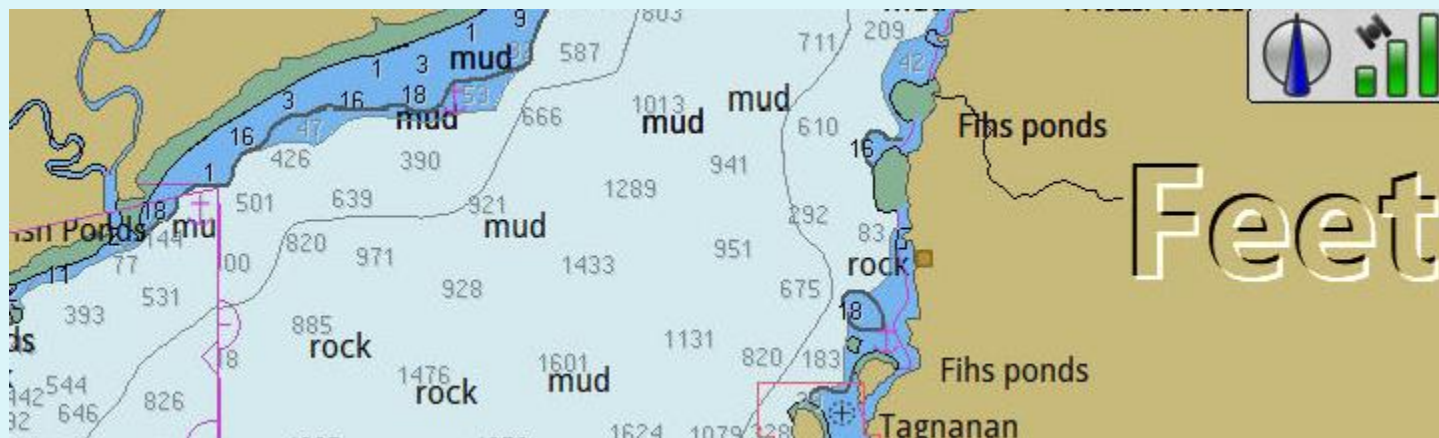
If for convenience you want all USB ports to be the same COM port number, repeat the above for each of the other USB ports. Since you have assigned COM1 to the first USB port you will get this error message. At each instance click on 'Yes'. **Remember to correct the COM Port in OpenCPN if you have changed the number.**



PROGRAM SETTINGS

Display Depth Units

My display shows soundings in feet.



I have chosen this unit since my depth sounder displays depths in feet.
You have a choice of units to be displayed.

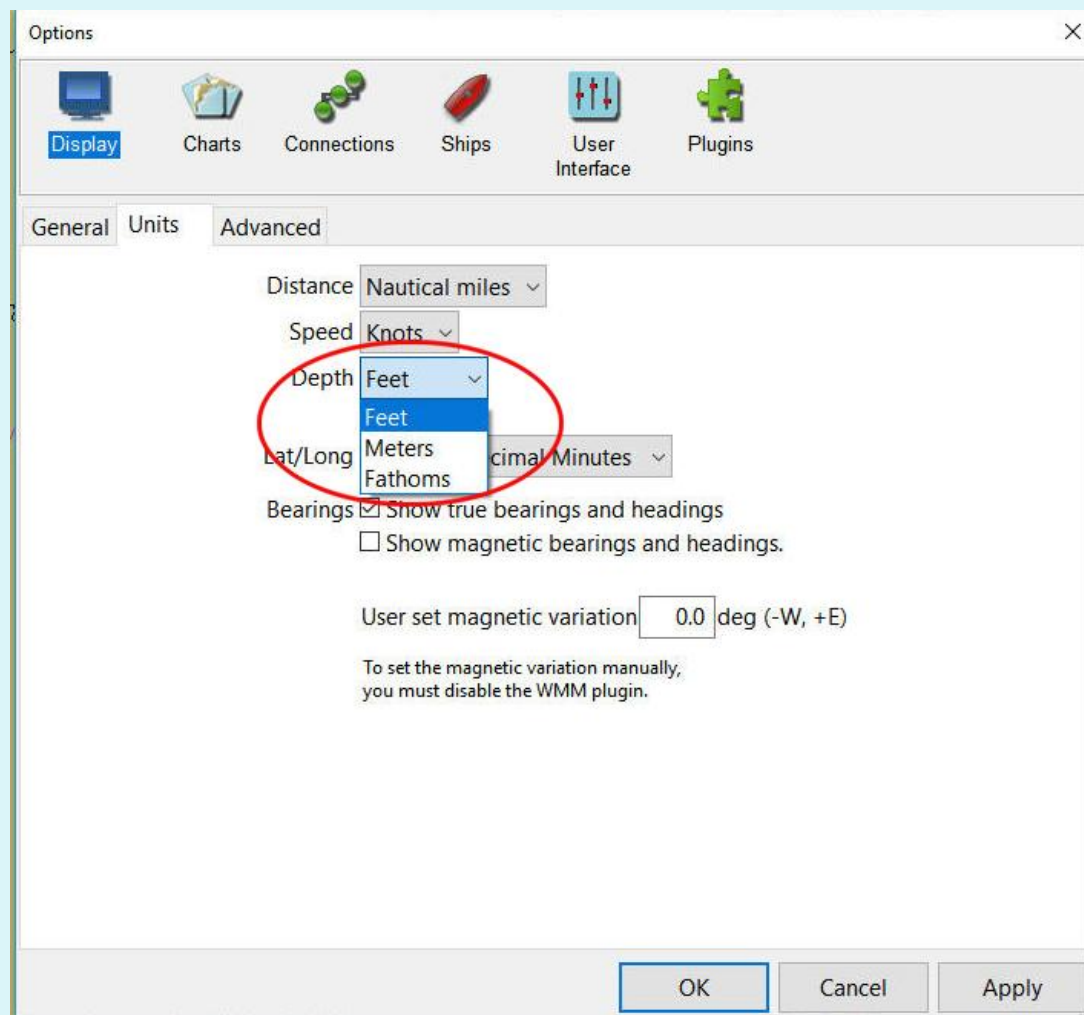
PROGRAM SETTINGS

Display Depth Units

Go to 'Options/Display' Units '

You have the choices as shown; Feet, Meters Or Fathoms.

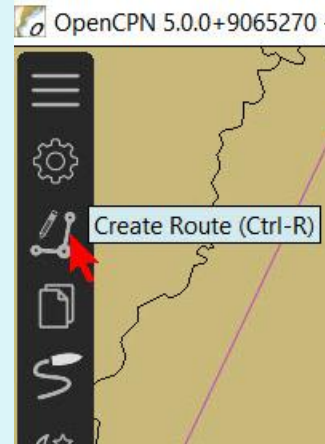
Other units such as distance, speed and position can be changed here as well.



ROUTES

Create a Route

Begin by selecting the 'Create Route' tool on the Tool Bar. (The shortcut is to hold down the 'CTL' key and press 'R'.)



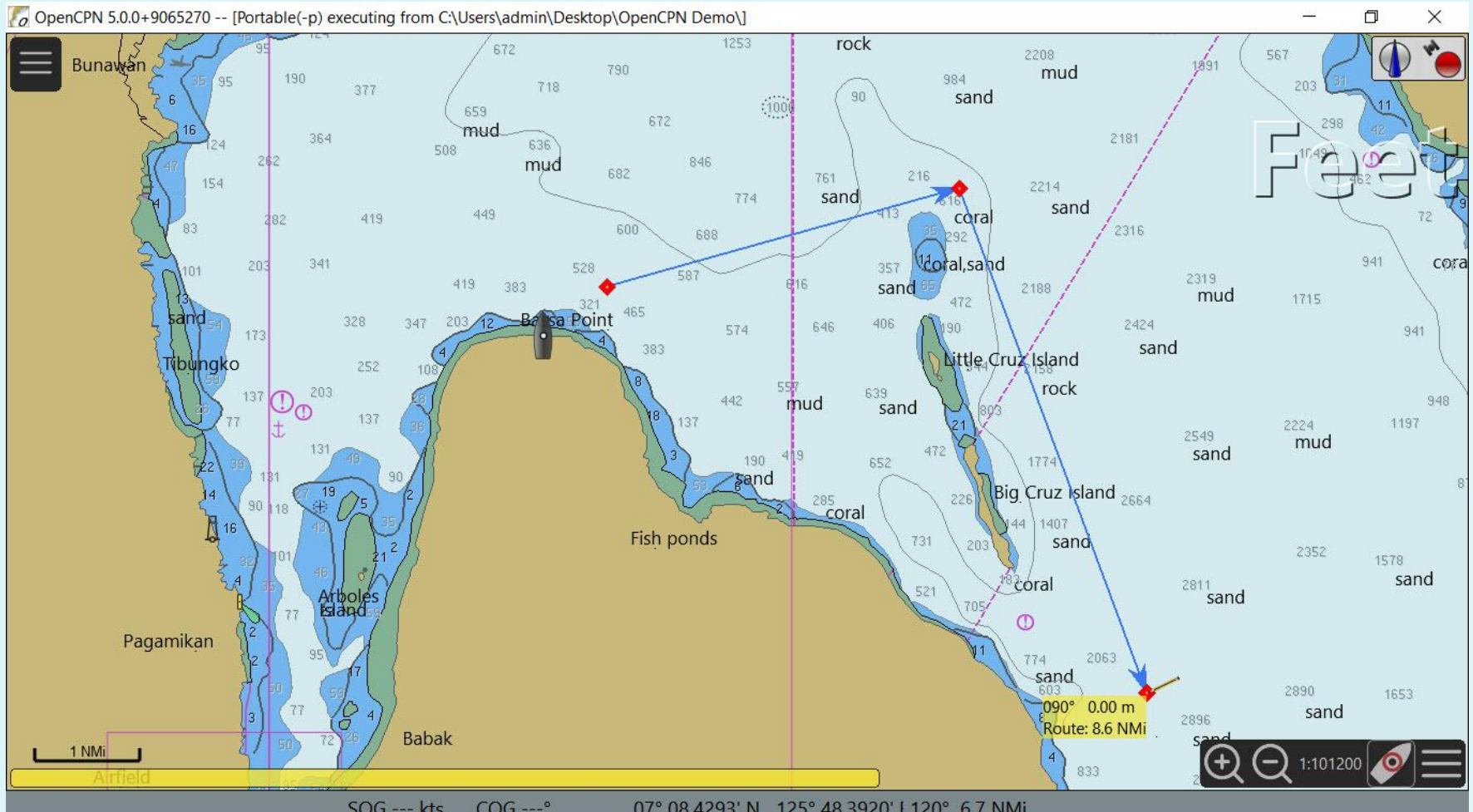
The cursor turns into a 'PENCIL' shape and the Taskbar is minimized.



ROUTES

Create a Route

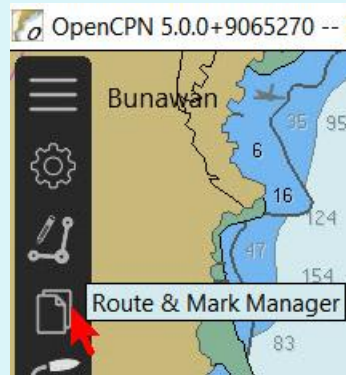
Click the 'pencil' pointer at desired locations to describe a route.
Continue dropping waypoints until the route has been completed then press the 'Esc' key to stop. (Alternatively right-click and select 'End Route')



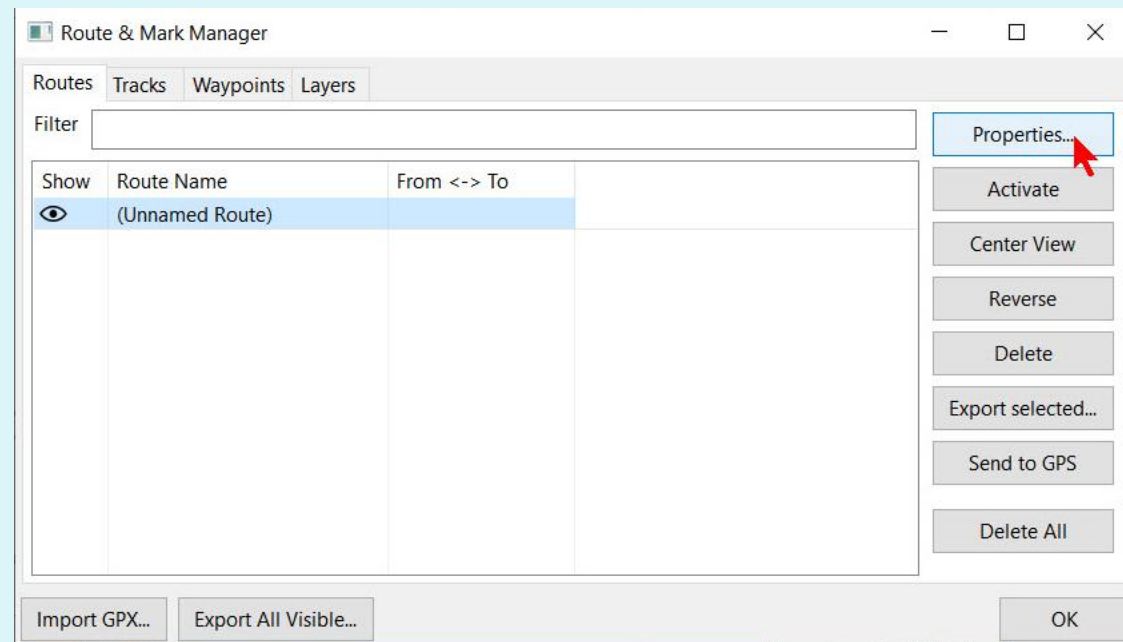
ROUTES

Create a Route

Open the 'Route & Mark Manager' from the Tool Bar.



On the 'Routes' tab select the new (Unnamed Route) then click on 'Properties'



ROUTES

Create a Route

Here you can give the route a name (e.g. SAMPLE ROUTE).
The route properties such as the length of the route and waypoint details are presented here.

Route Properties

Properties

Name
SAMPLE ROUTE

Depart From
Destination

Total distance
7.21 NMi

Plan speed
6.00

Time enroute
01 Hours 12 Minutes

Departure Time (m/d/y h:m)

Time shown as
☐ UTC ☒ Local @ PC ☐ LMT @ Location

Color: Default color Style: Default Width: Default

Waypoints

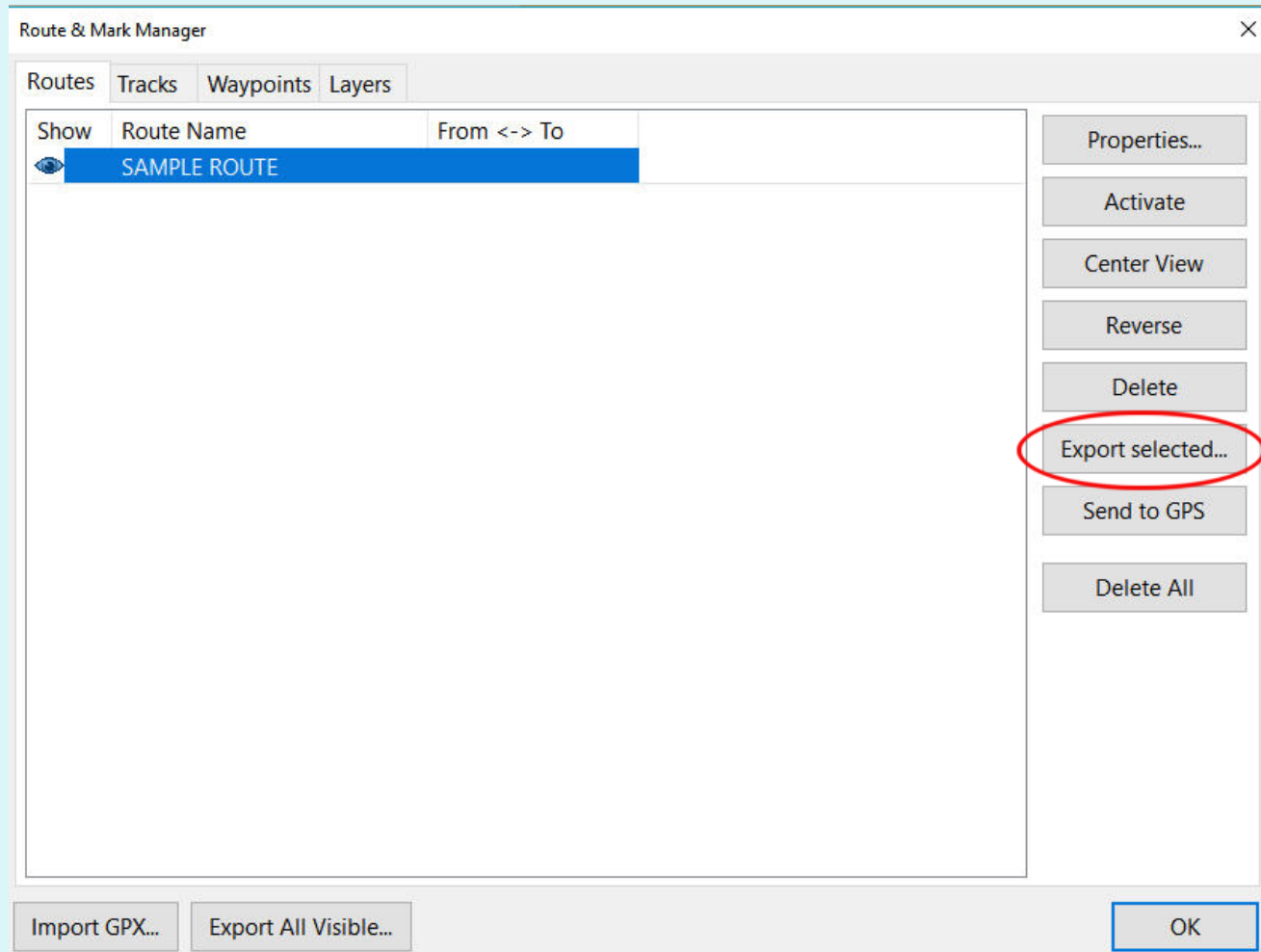
L.	To Waypoint	Distance	Bearing	Latitude	Longitude	ETE	Speed	Next tide e...	Description	Co
---	001	0.58 NMi	048 Deg. T	07 12.2 N	125 43.1 E	Start	6.00			072
1	002	2.95 NMi	072 Deg. T	07 13.1 N	125 45.9 E	00 H 29 M	6.00			091
2	003	0.80 NMi	091 Deg. T	07 13.1 N	125 46.7 E	00 H 37 M	6.00			167
3	004	3.45 NMi	167 Deg. T	07 09.7 N	125 47.4 E	01 H 12 M	6.00			

Print Route Extend Route Split Route Cancel OK

ROUTES

Save a Route

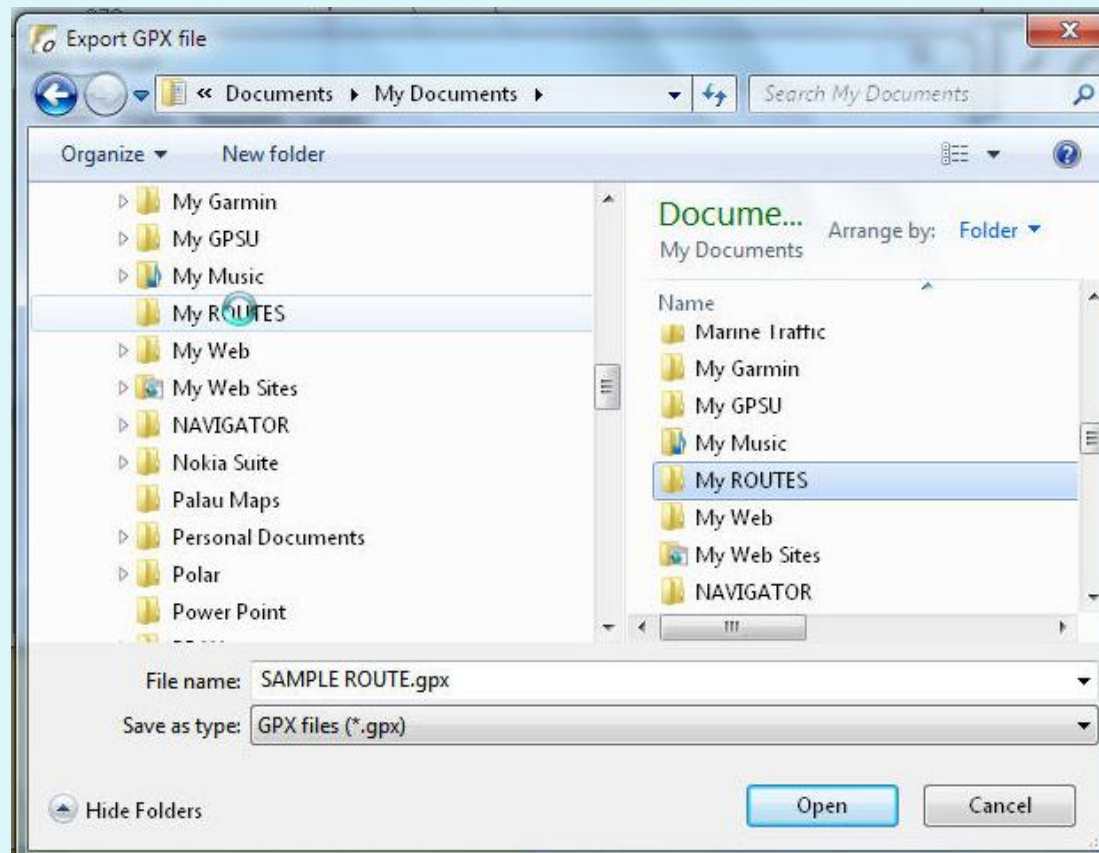
To save the route for future reference go to the 'Route & Mark Manager'. Select the route and click on 'Export selected ...'.



ROUTES

Save a Route

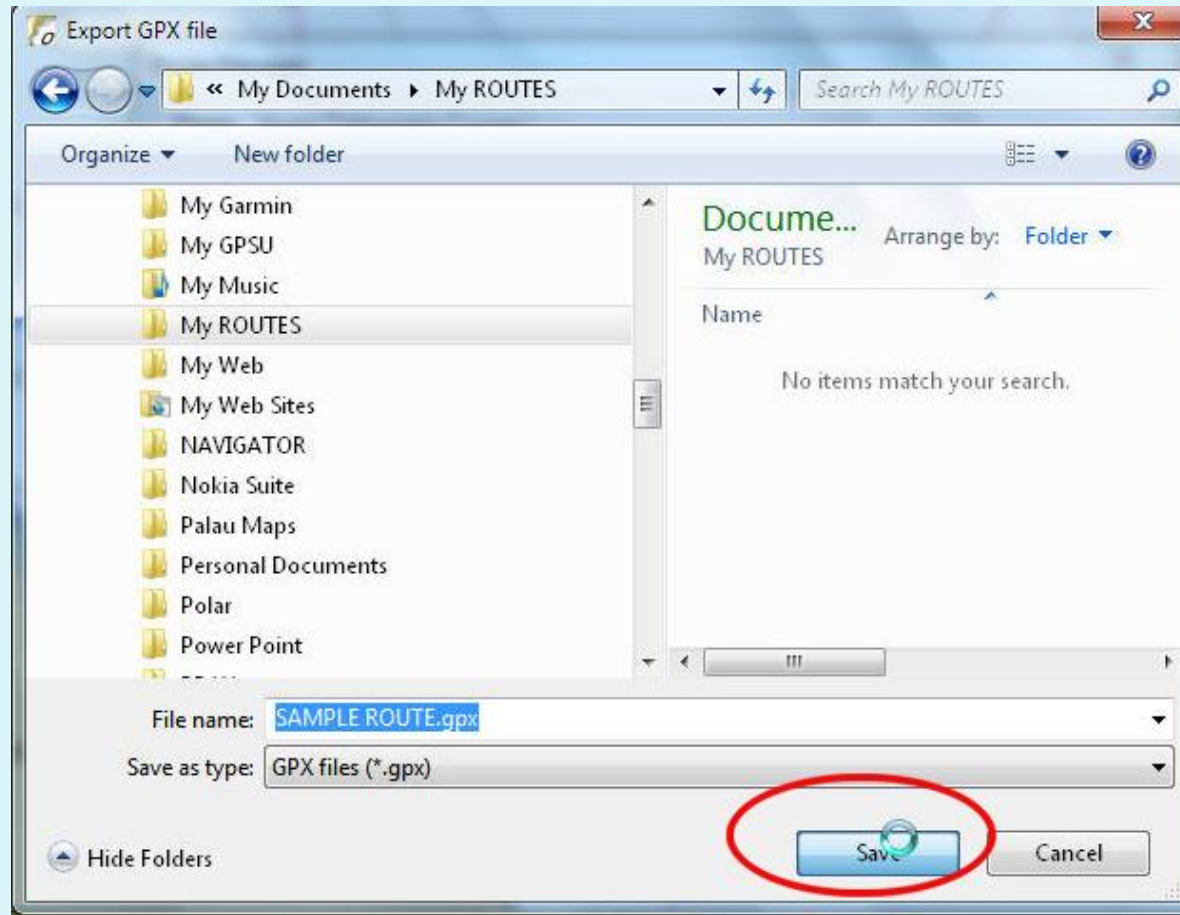
Navigate to where you save your routes (e.g. such as My Routes under My Documents) and open the folder.



ROUTES

Save a Route

Click on 'Save' and the route is saved to the hard drive.



ROUTES

Change a Route

To make changes within a route, right-click on the route and click on 'Insert waypoint'

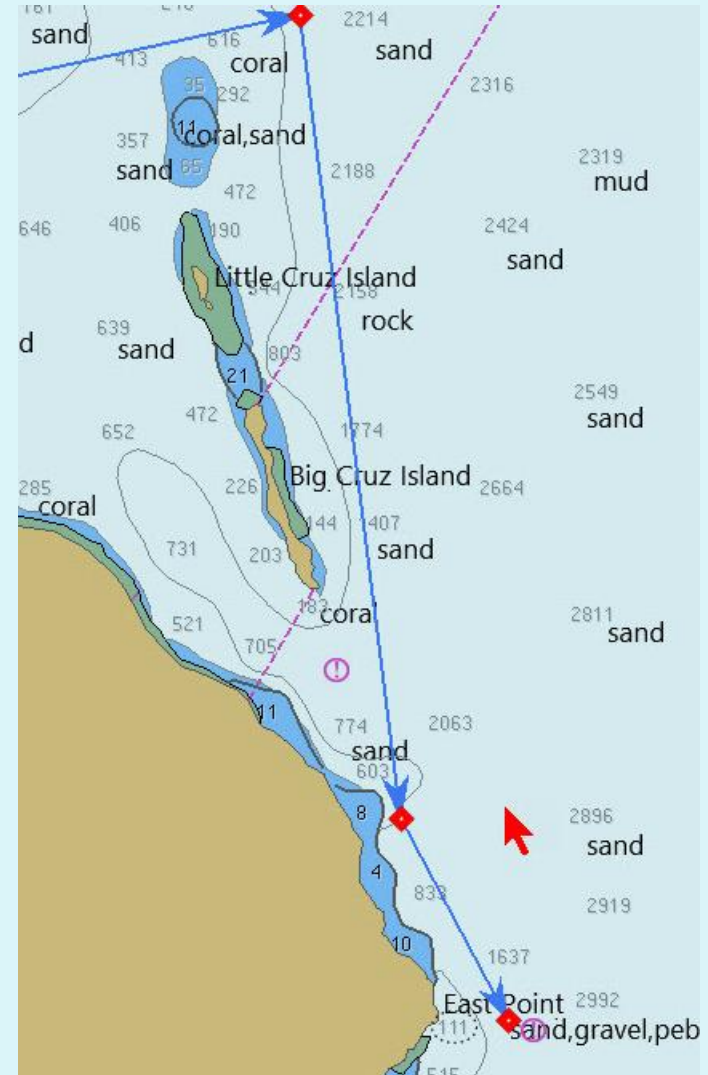


ROUTES

Change a Route

Place the cursor on the newly created waypoint and move it to the desired location

(But)



ROUTES

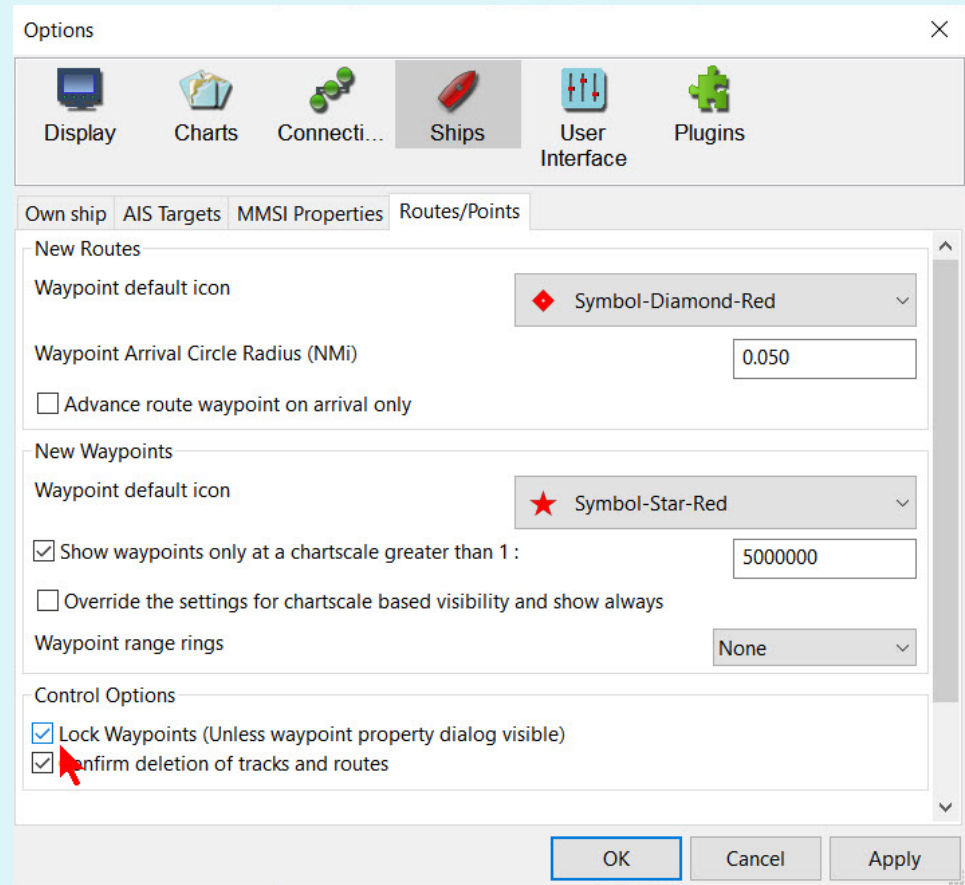
Change a Route

It may happen that you cannot move a waypoint on the newly created route.

This is because all waypoints have been 'LOCKED'

Go to 'Options/Ships/Routes/Points' AND **UNCHECK** the box 'Lock Waypoints...'

(More discussion on this later)



ROUTES

Change a Route

Displaying the 'Route Properties' shows the changes to the route. Longer distance and the new waypoint that was added.

Route Properties

Properties

Name
SAMPLE ROUTE

Depart From
Destination

Total distance
7.38 NMi

Plan speed
6.00

Time enroute
01 Hours 13 Minutes

Departure Time (m/d/y h:m)

Time shown as
☐ UTC ☒ Local @ PC ☐ LMT @ Location

Color: Default color Style: Default Width: Default

Waypoints

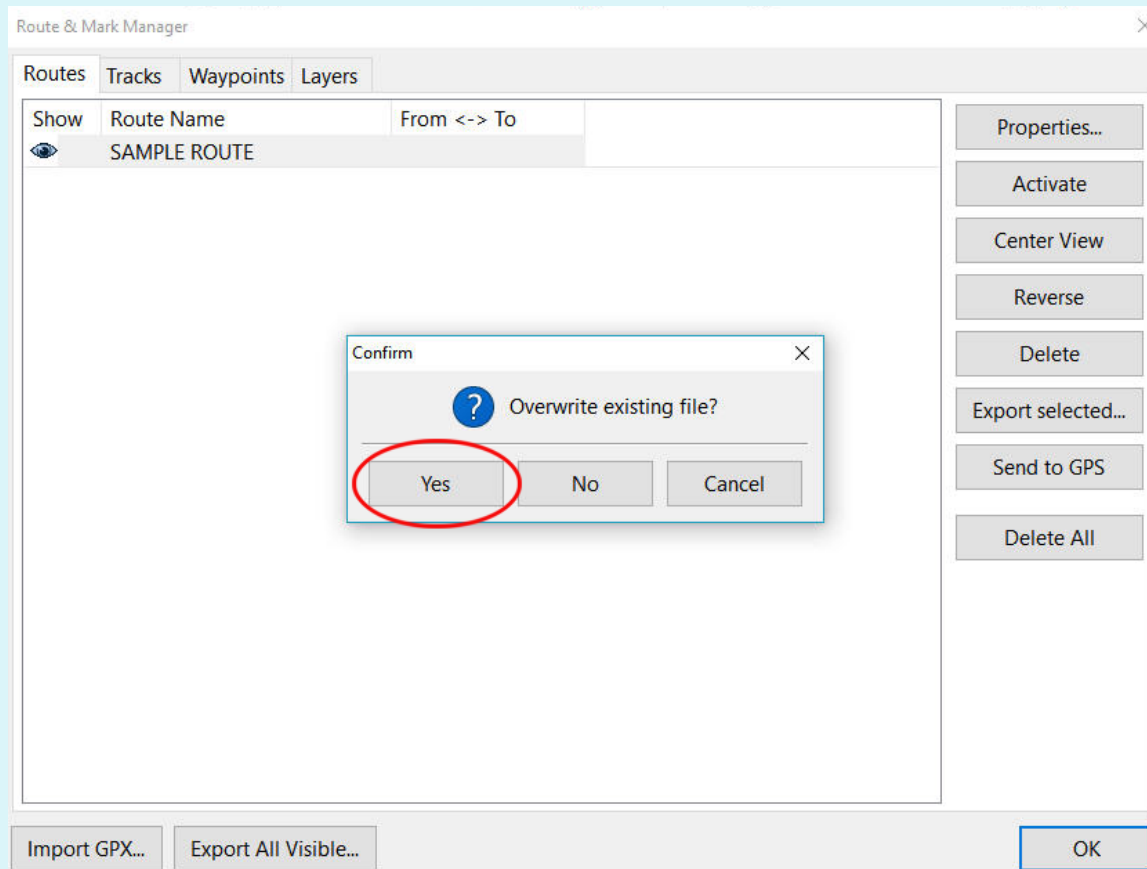
L.	To Waypoint	Distance	Bearing	Latitude	Longitude	ETE	Speed	Next tide e...	Description	Co
---	001	0.58 NMi	048 Deg. T	07 12.2 N	125 43.1 E	Start	6.00			072
1	002	2.95 NMi	072 Deg. T	07 13.1 N	125 45.9 E	00 H 29 M	6.00			091
2	003	0.80 NMi	091 Deg. T	07 13.1 N	125 46.7 E	00 H 37 M	6.00			186
3	NM001	1.06 NMi	186 Deg. T	07 12.1 N	125 46.6 E	00 H 48 M	6.00			161
4	004	2.56 NMi	161 Deg. T	07 09.6 N	125 47.4 E	01 H 13 M	6.00			

Print Route Extend Route Split Route Cancel OK

ROUTES

Change a Route

The route was saved previously and does not contain the newly created information. From the 'Route & Mark Manager' export the route again letting it overwrite the old route.



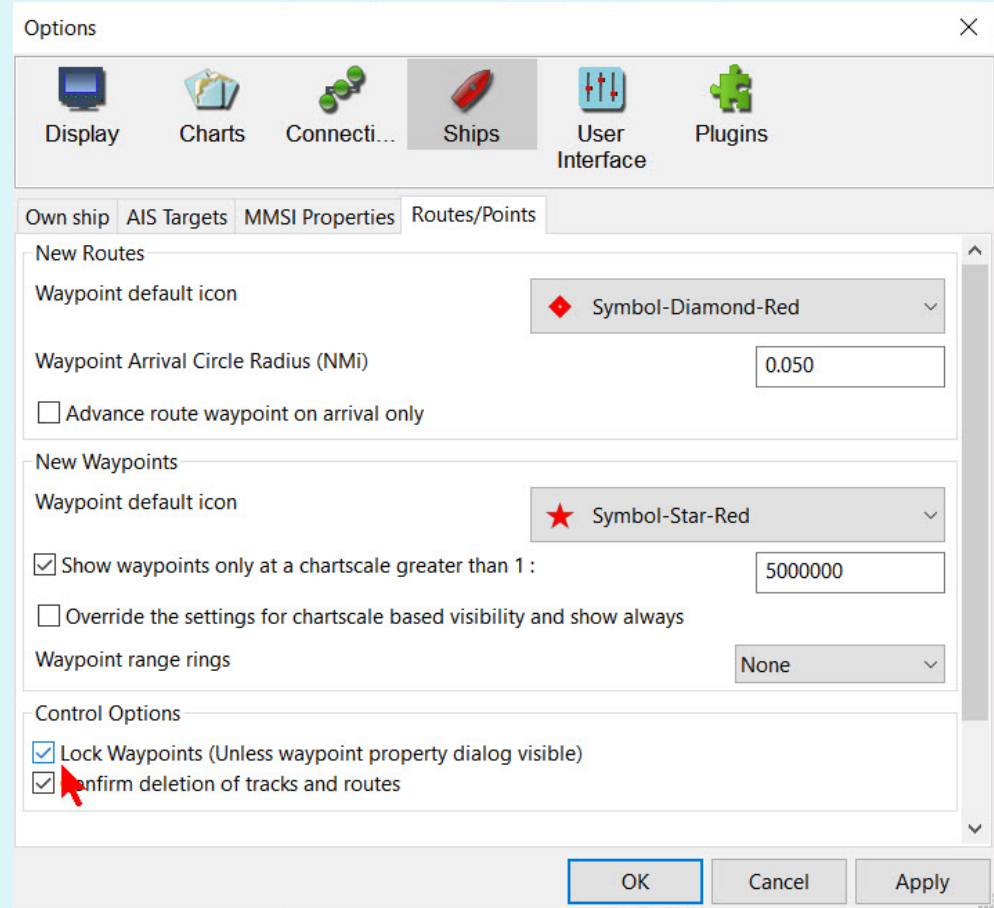
LOCK WAYPOINTS

Earlier we saw how to lock or unlock waypoints using The appropriate 'Options ' page.

The rationale for keeping waypoints locked is to avoid the accidental change of a waypoint location while underway and following a route. (A 'finger fart')

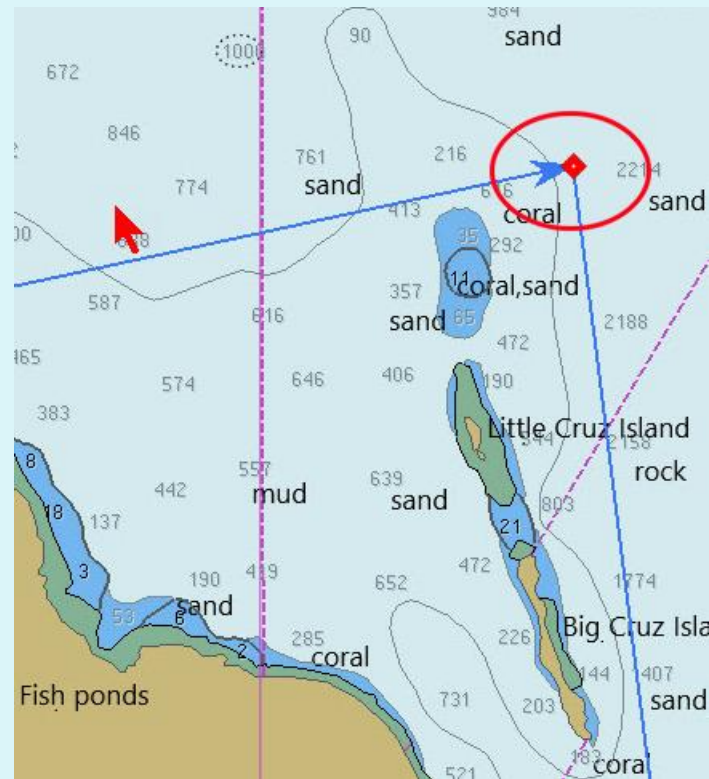
An alternative exists to allow a waypoint to be temporarily unlocked and moved.

Note it says '(Unless waypoint Property dialog visible)



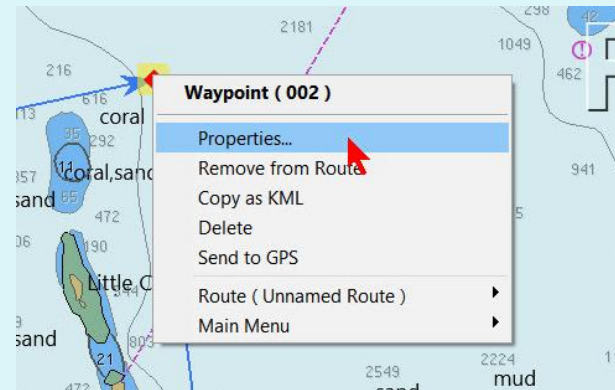
LOCK WAYPOINTS

Here is a waypoint in a route I want to move. With the waypoints locked I cannot click and drag it.

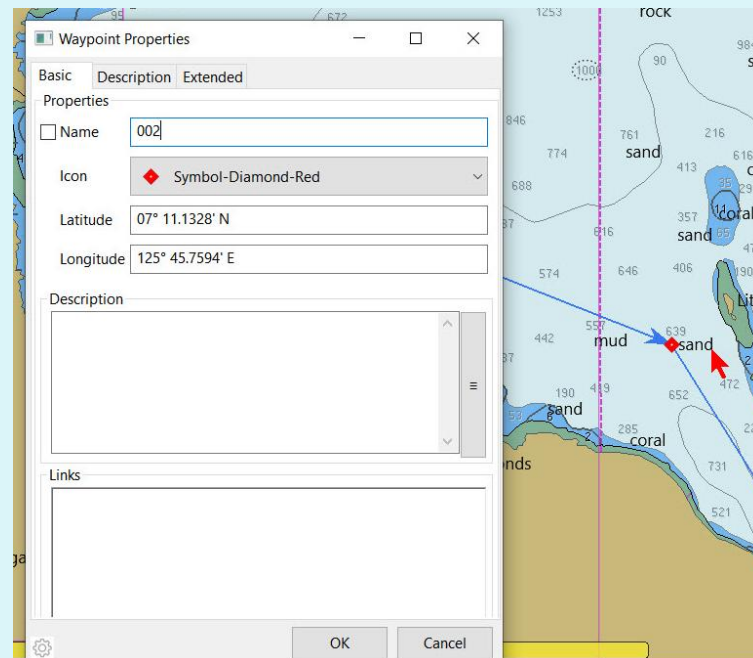


LOCK WAYPOINTS

Right-click on the waypoint and select 'Properties'. (An alternative is to double-click on the waypoint)



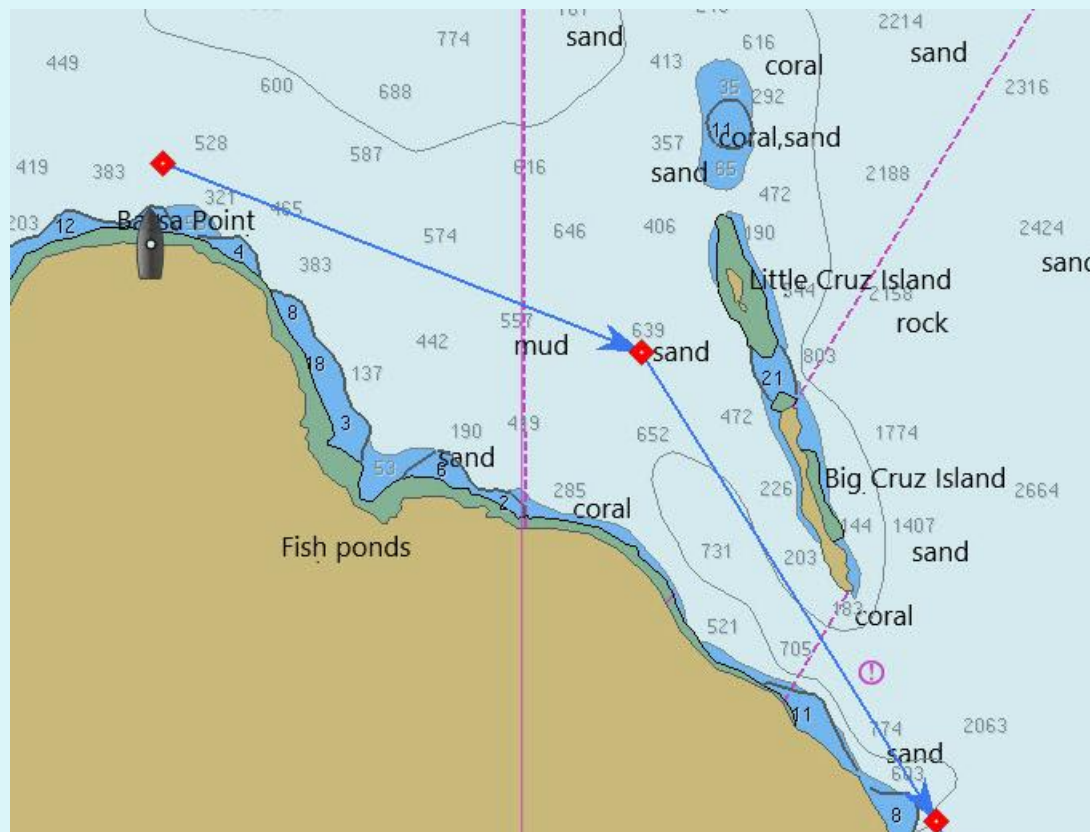
While the waypoint 'Properties' dialog screen is open the waypoint can now be moved.



LOCK WAYPOINTS

Closing the 'Properties' dialog again locks the waypoint in the new position.

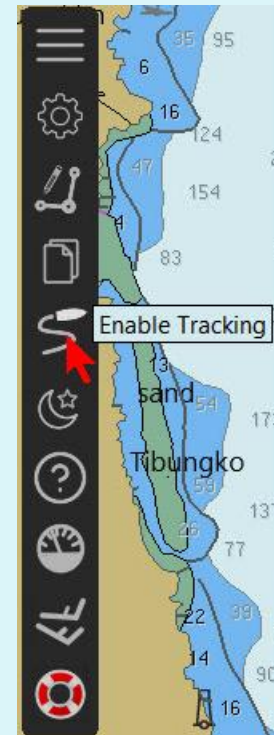
REMEMBER TO 'Save' THIS CHANGED ROUTE!



TRACKS

Create a Track

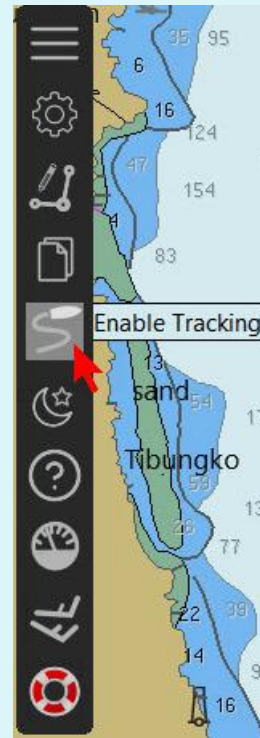
Click on the 'Enable Tracking' icon to activate displaying your track.



TRACKS

Create a Track

Tracking is confirmed by
the icon becoming shaded.

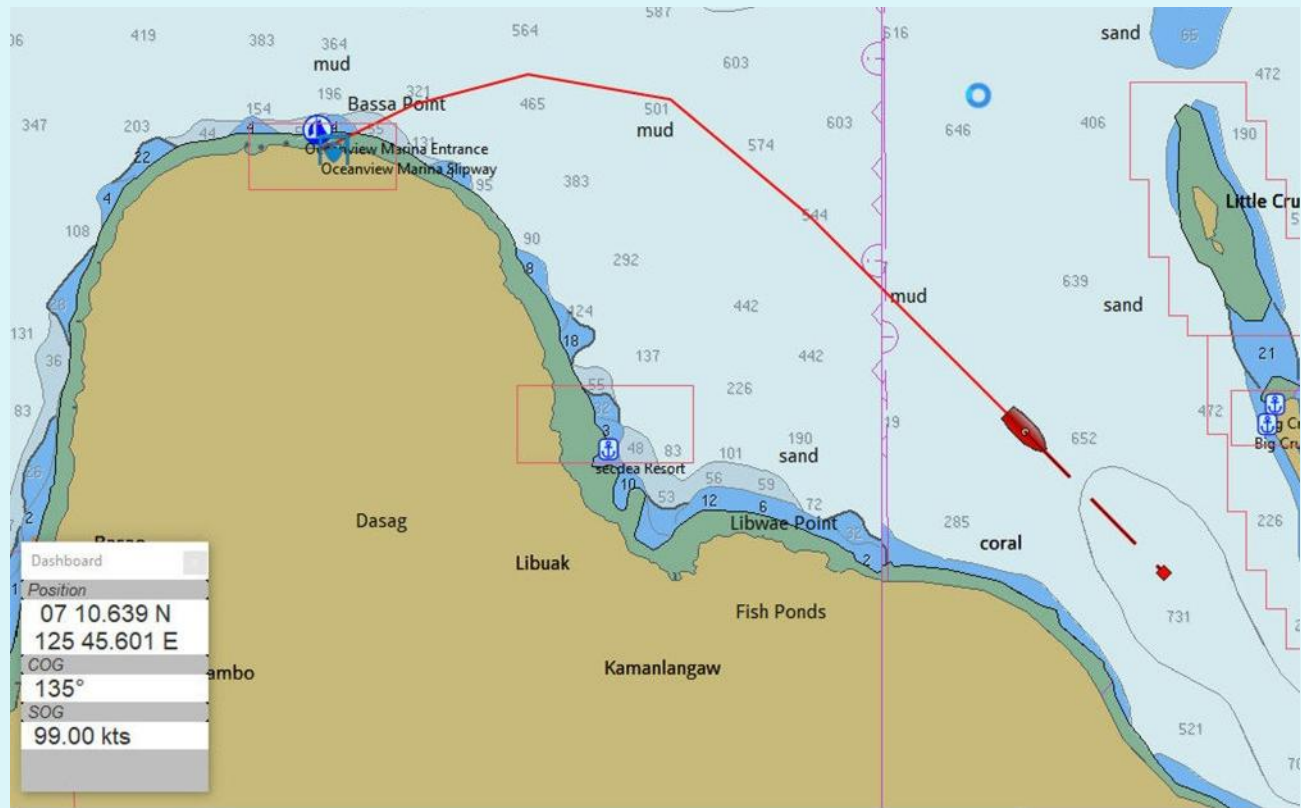


TRACKS

Create a Track

The vessel's track is displayed.

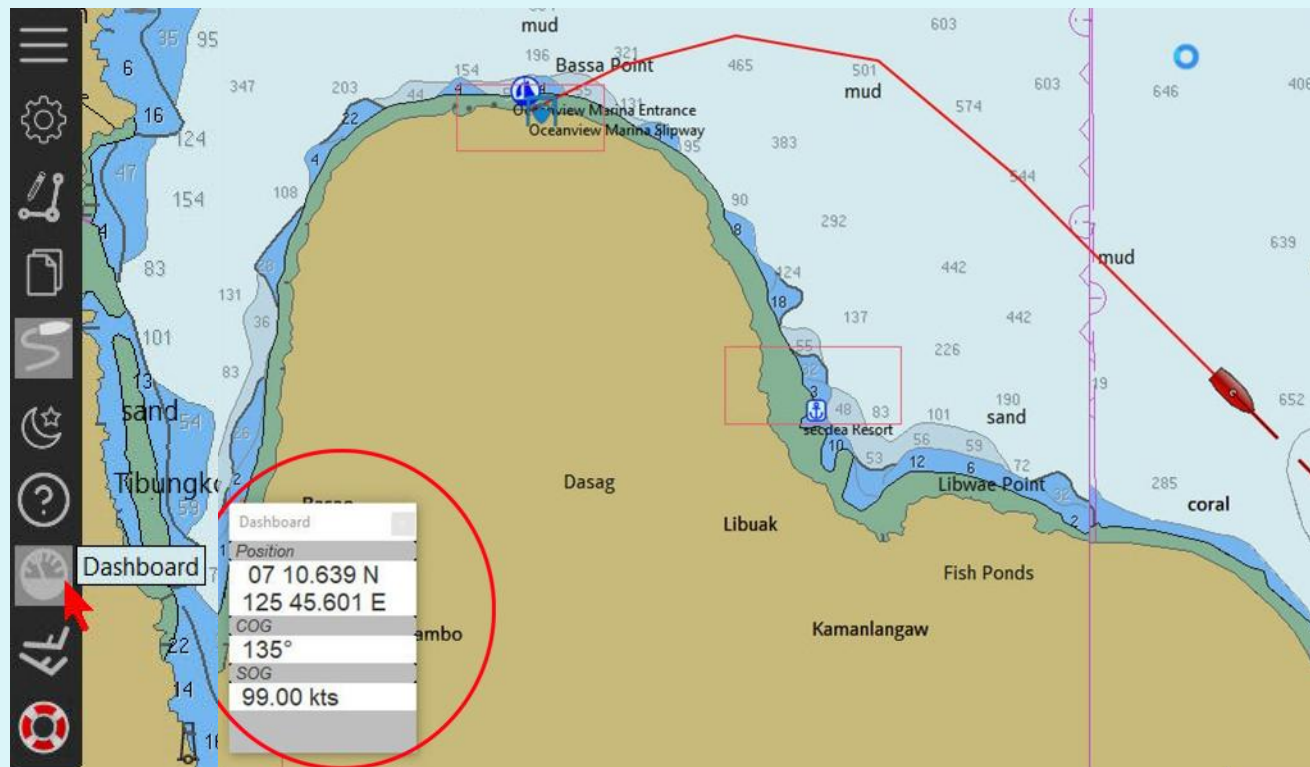
(No, my boat wasn't doing 99 knots .. I used GPS simulation to save time 😊)



TRACKS

Create a Track

Note the Dashboard has been displayed by clicking on the Icon in the Taskbar



TRACKS

Create a Track

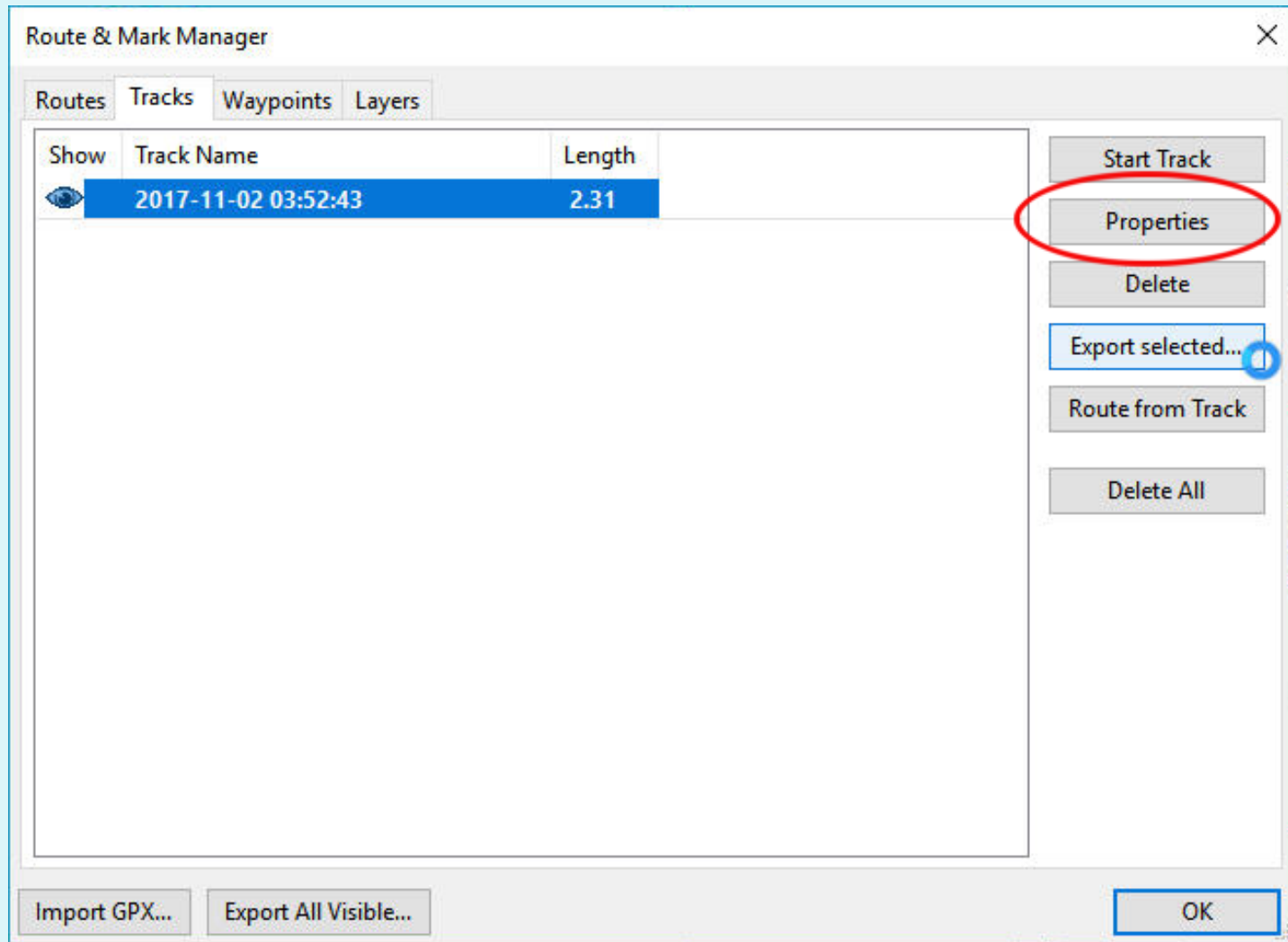
The simulation is stopped here to describe saving the track.



TRACKS

Save a Track

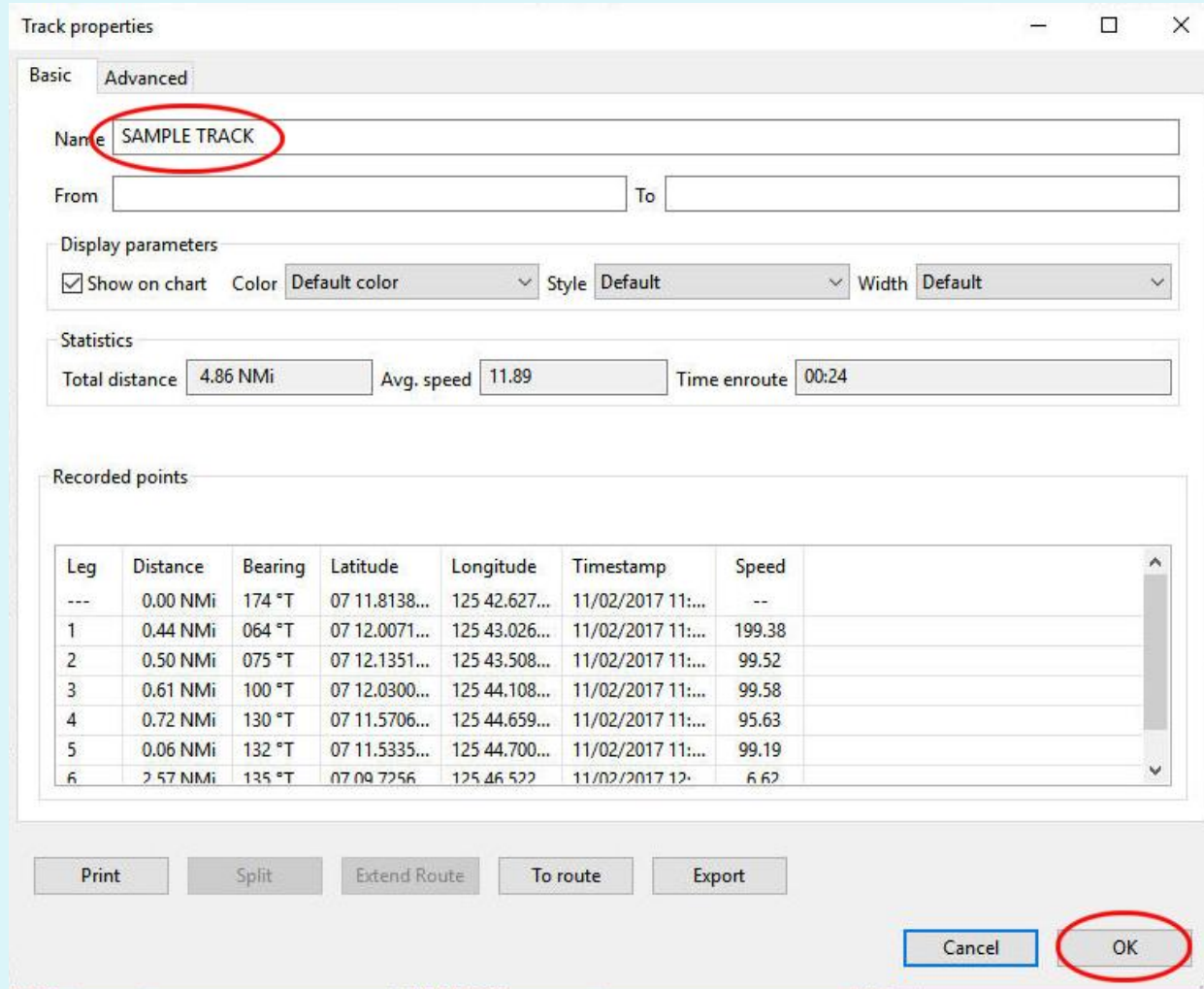
In the 'Route & Mark Manager' highlight the track and click on 'Properties'



TRACKS

Save a Track

Give the track a name (in this case 'SAMPLE TRACK') then click on 'OK'



Track properties

Basic Advanced

Name **SAMPLE TRACK**

From To

Display parameters

☒ Show on chart Color Default color Style Default Width Default

Statistics

Total distance 4.86 NMi Avg. speed 11.89 Time enroute 00:24

Recorded points

Leg	Distance	Bearing	Latitude	Longitude	Timestamp	Speed
---	0.00 NMi	174 °T	07 11.8138...	125 42.627...	11/02/2017 11:...	--
1	0.44 NMi	064 °T	07 12.0071...	125 43.026...	11/02/2017 11:...	199.38
2	0.50 NMi	075 °T	07 12.1351...	125 43.508...	11/02/2017 11:...	99.52
3	0.61 NMi	100 °T	07 12.0300...	125 44.108...	11/02/2017 11:...	99.58
4	0.72 NMi	130 °T	07 11.5706...	125 44.659...	11/02/2017 11:...	95.63
5	0.06 NMi	132 °T	07 11.5335...	125 44.700...	11/02/2017 11:...	99.19
6	2.57 NMi	135 °T	07 09.7256...	125 46.522...	11/02/2017 12:...	6.62

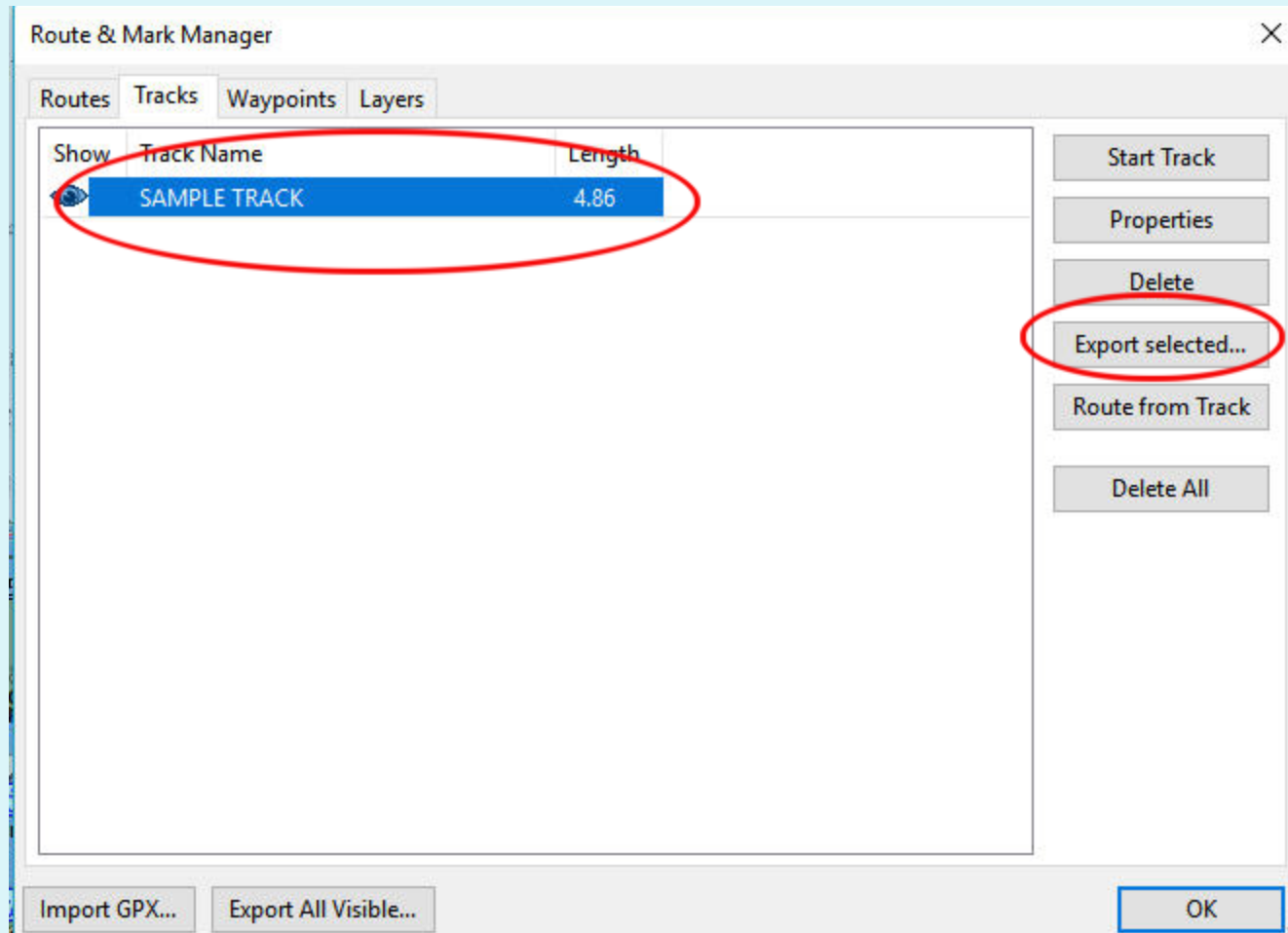
Print Split Extend Route To route Export

Cancel OK

TRACKS

Save a Track

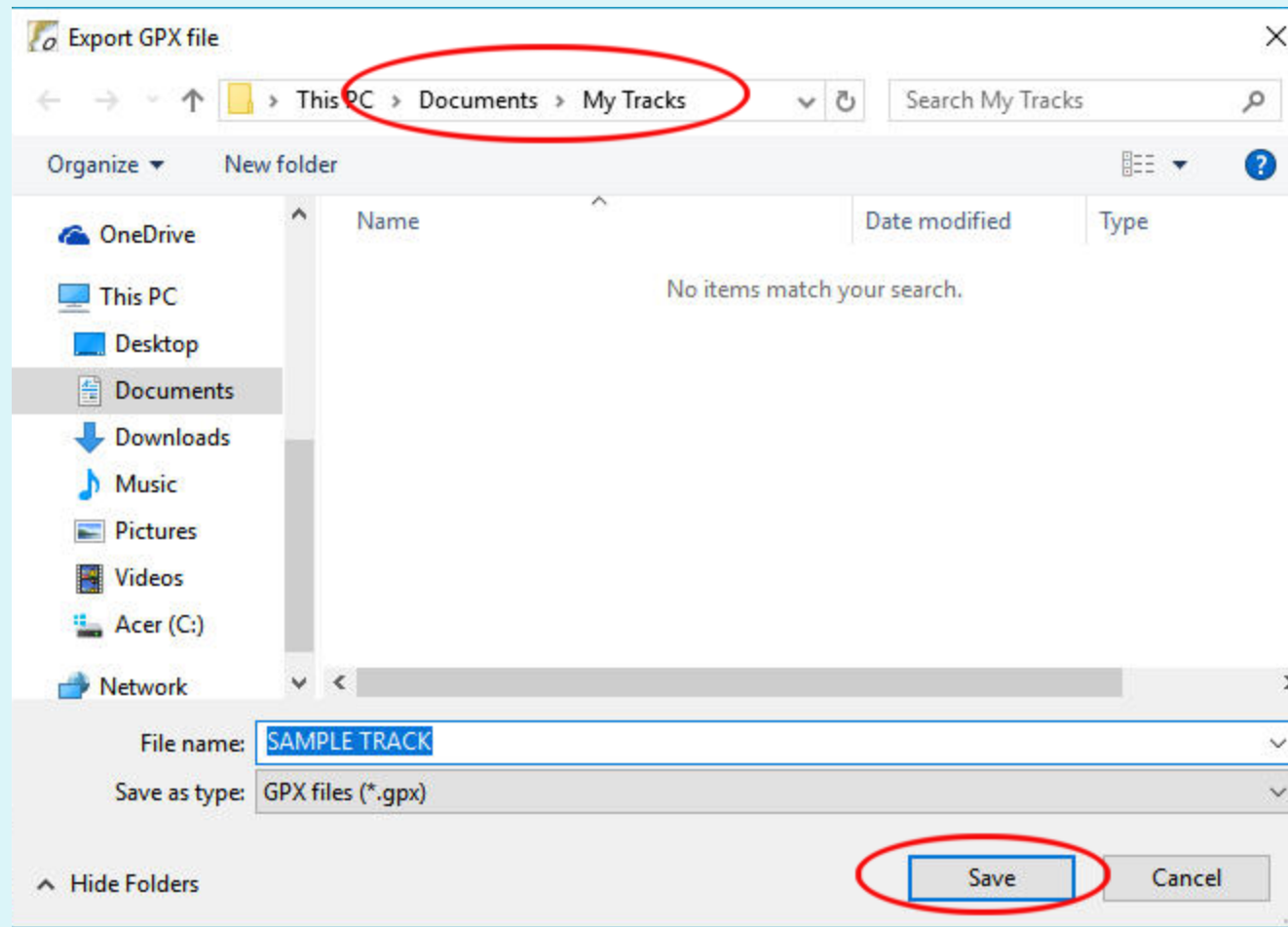
Select the named track and click on 'Export selected ...':



TRACKS

Save a Track

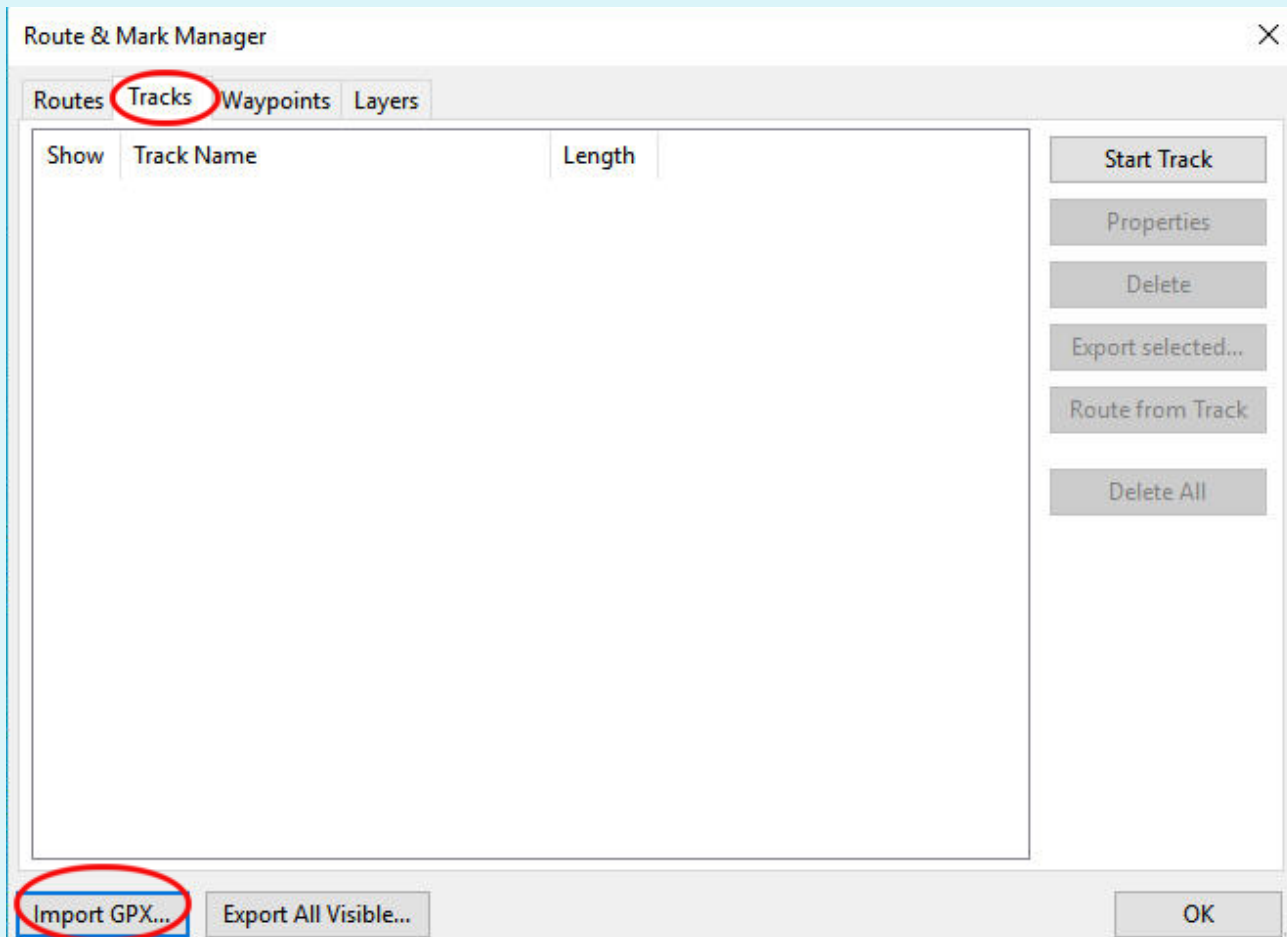
Navigate to where you save your tracks and click on 'Save'. The track is now saved on the hard drive for future reference.



TRACKS

Display a Saved Track

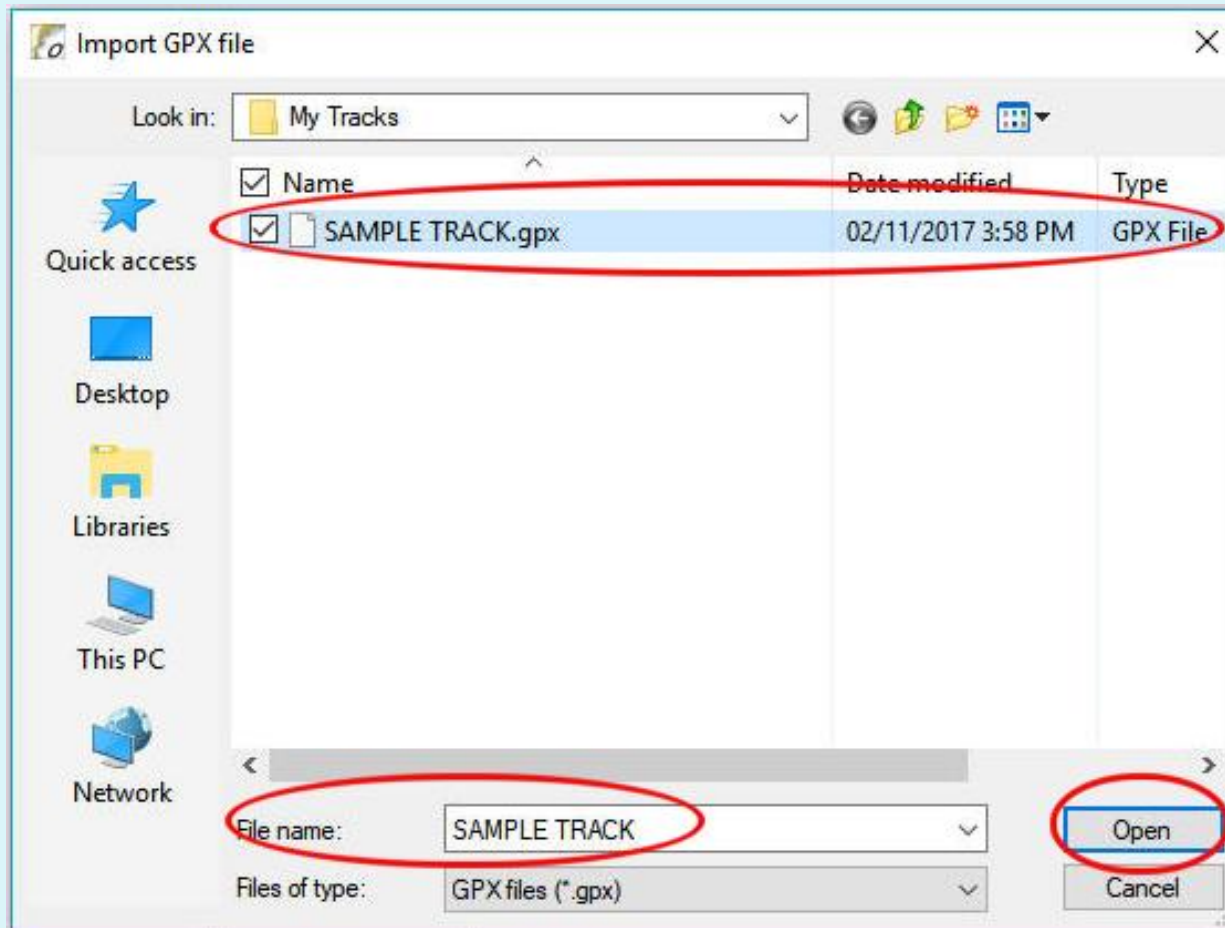
To display a saved track, in 'Route & Mark Manager ' select the 'Tracks' tab and click on 'Import GPX ...'



TRACKS

Display a Saved Track

Navigate to your saved tracks, select the desired one (which fills in the 'File name box) and click on 'Open'.



TRACKS

Display a Saved Track

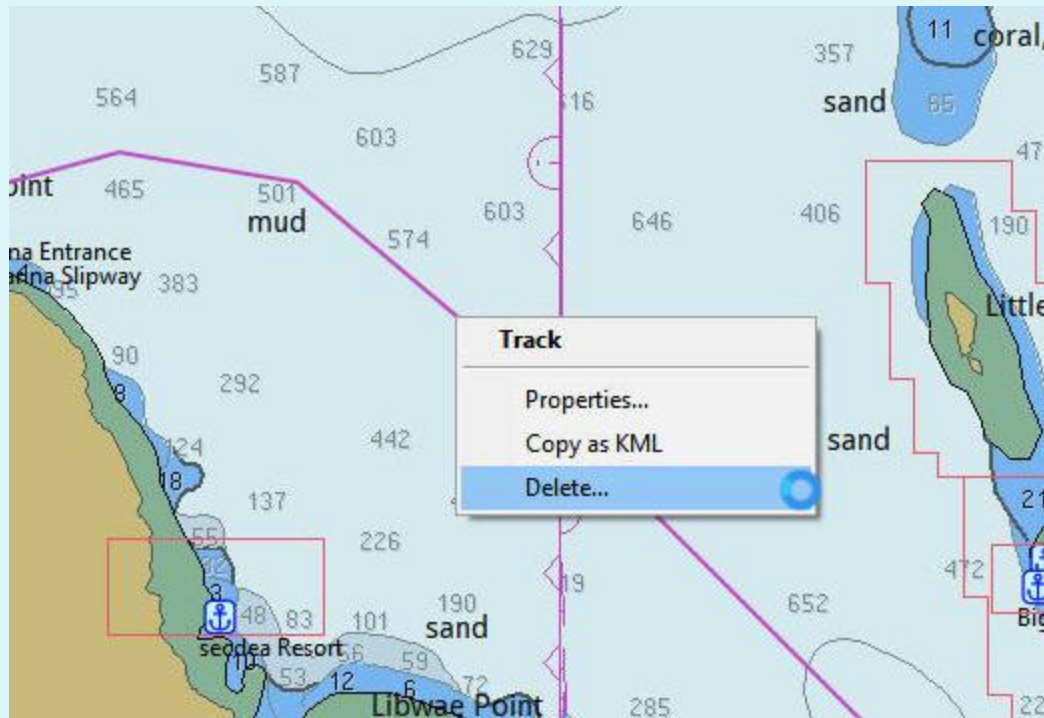
The track is displayed again on the chart.



TRACKS

Display a Saved Track

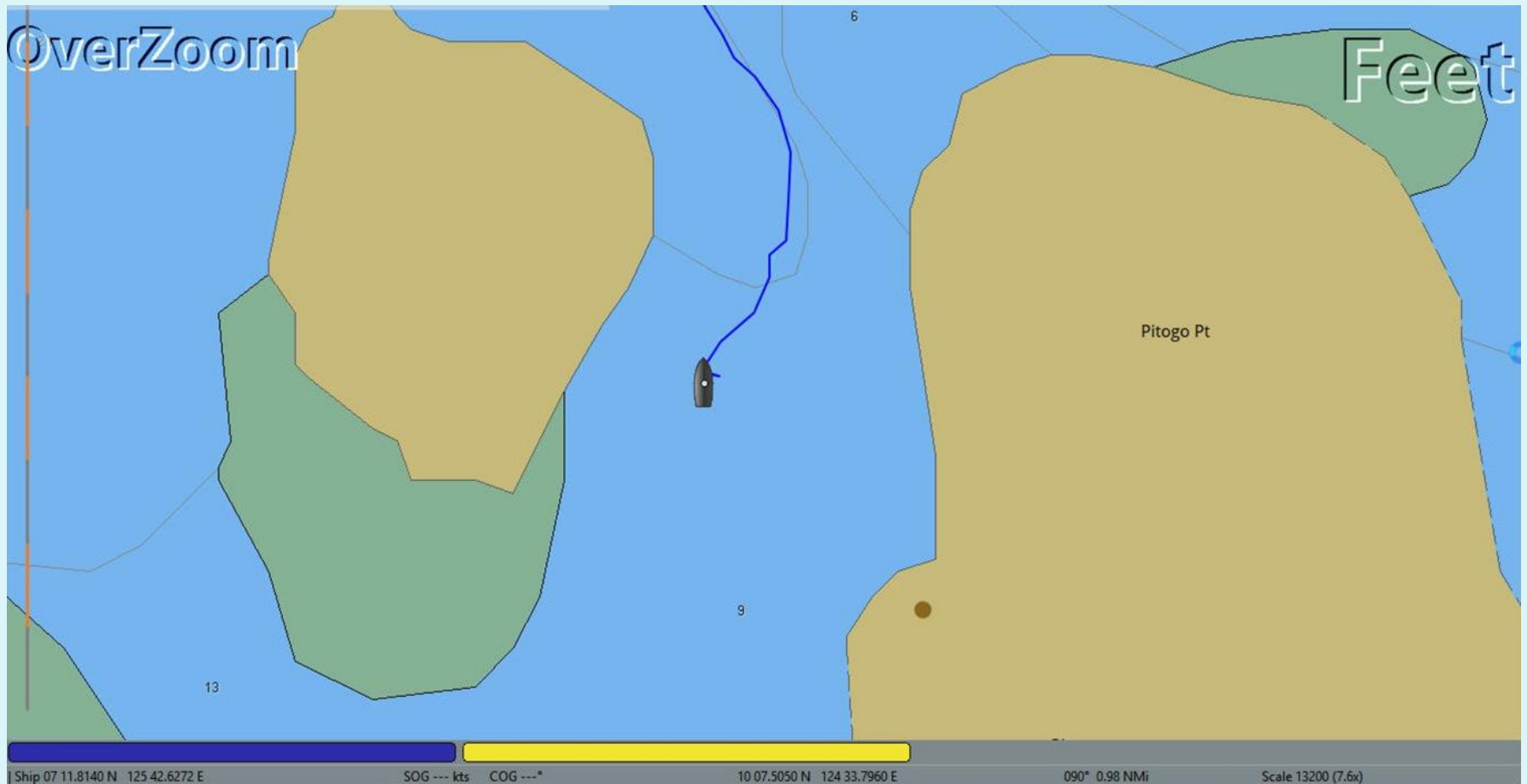
You can delete the track from the screen using the 'Route & Mark Manager' or by right-clicking on the track and selecting 'Delete'.



ANCHORAGES

Save an Anchorage Location

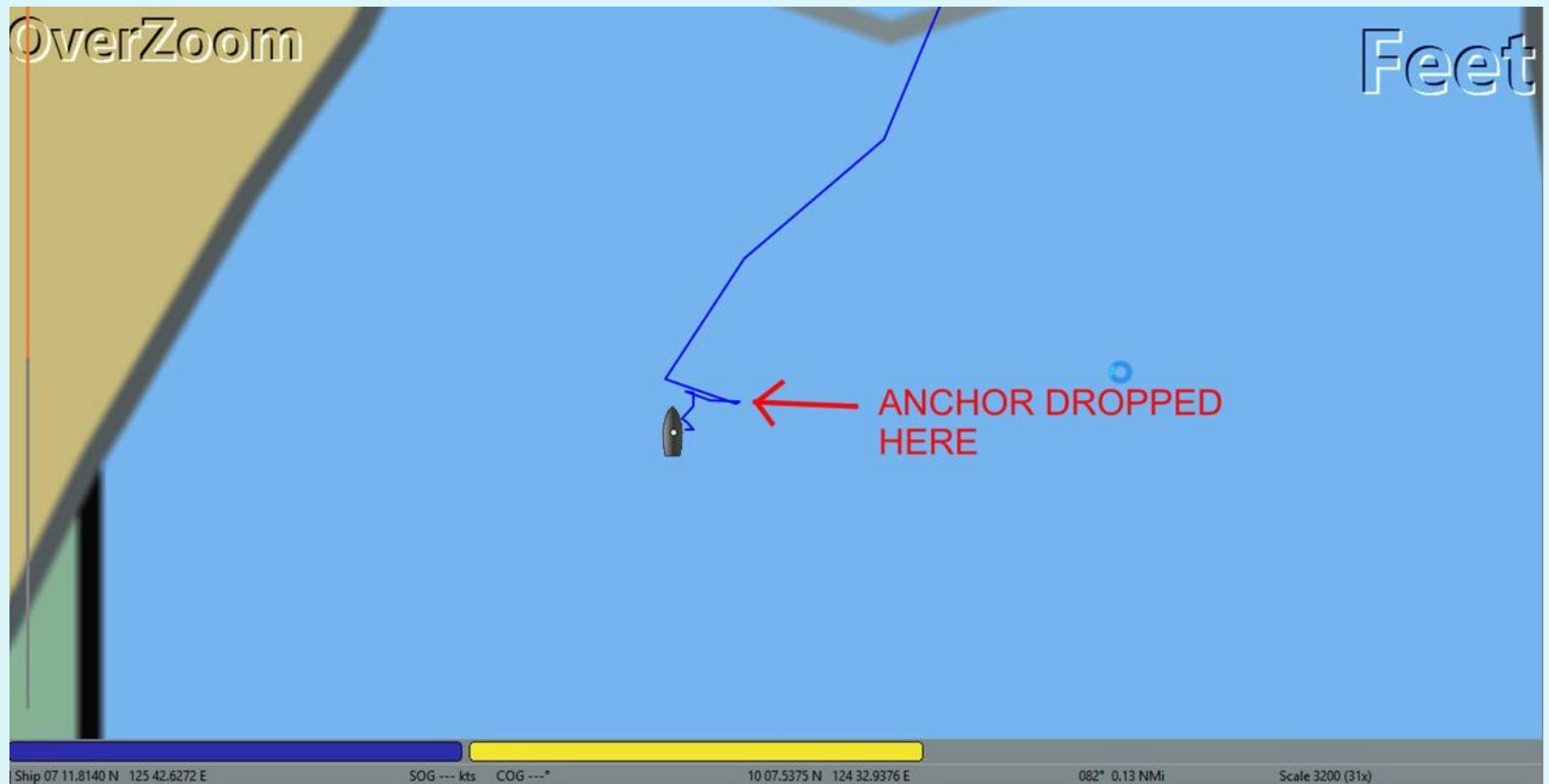
Shown below is the arrival at an anchorage. I want to save this location for future reference.



ANCHORAGES

Save an Anchorage Location

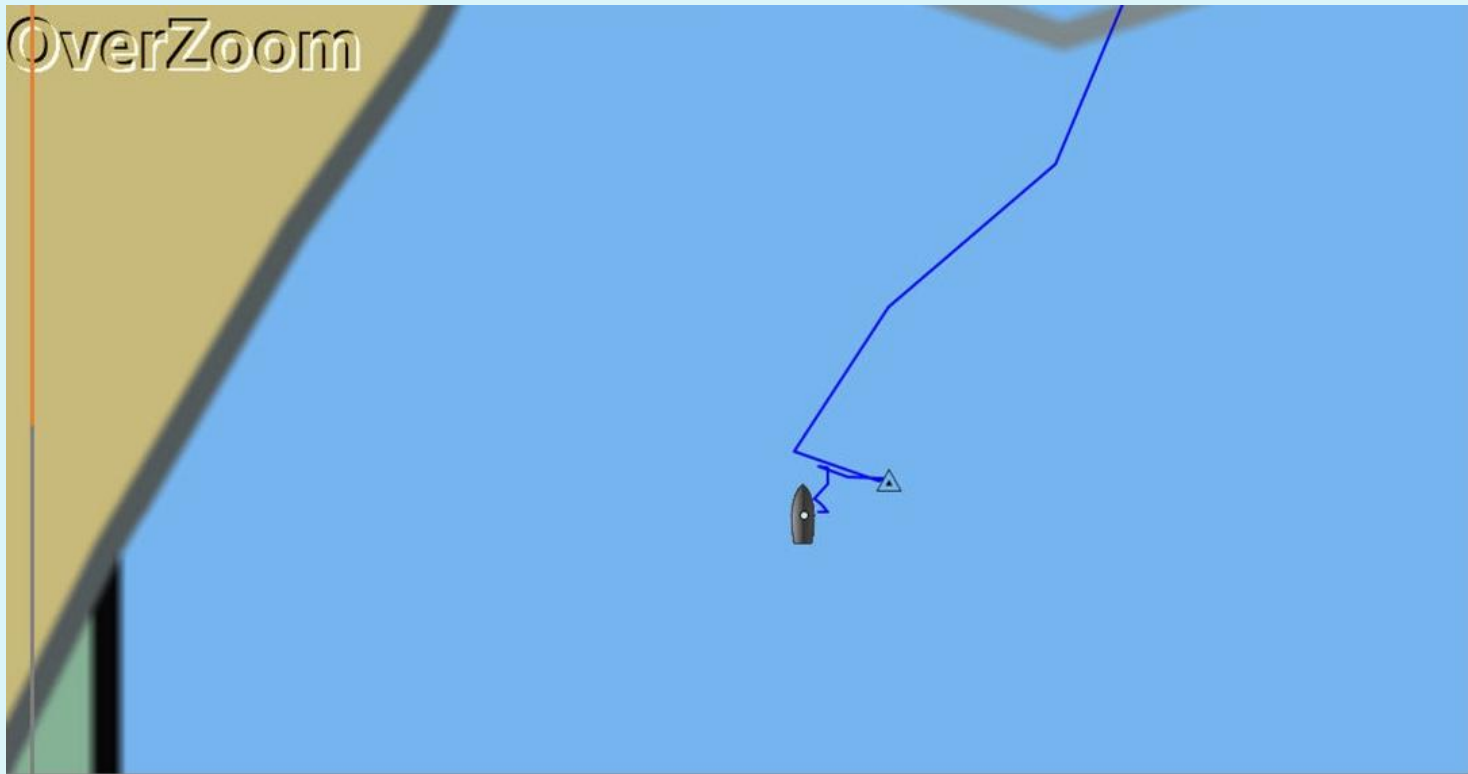
Zoom in to show where the anchor was dropped.



ANCHORAGES

Save an Anchorage Location

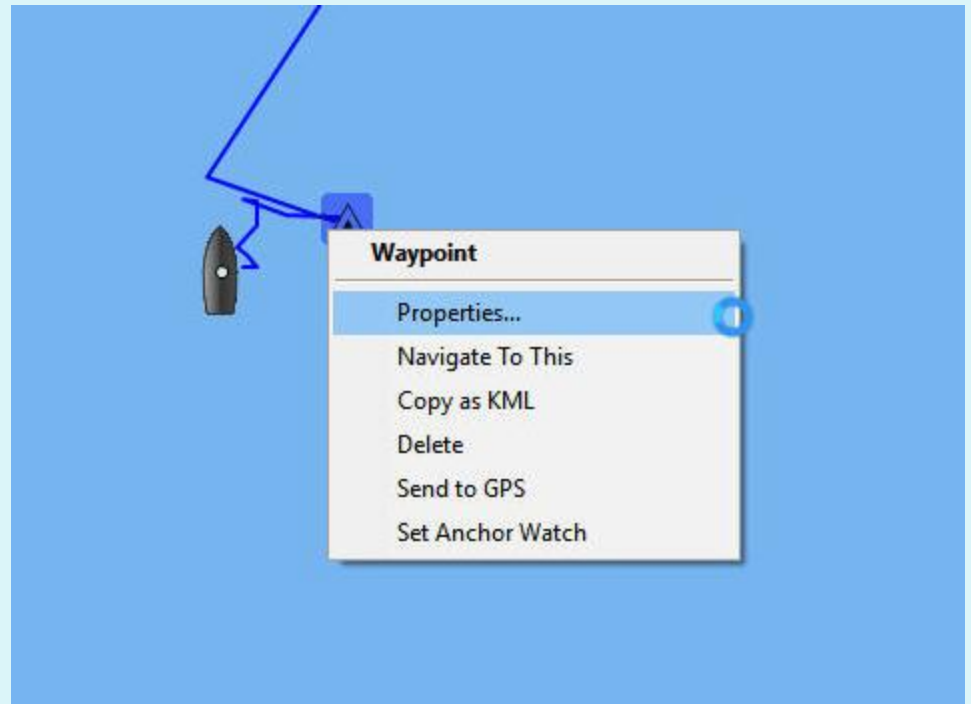
Right-click at the anchor location and click on 'Drop Mark' or use 'Ctl-M'.
A small triangle appears at the selected point.



ANCHORAGES

Save an Anchorage Location

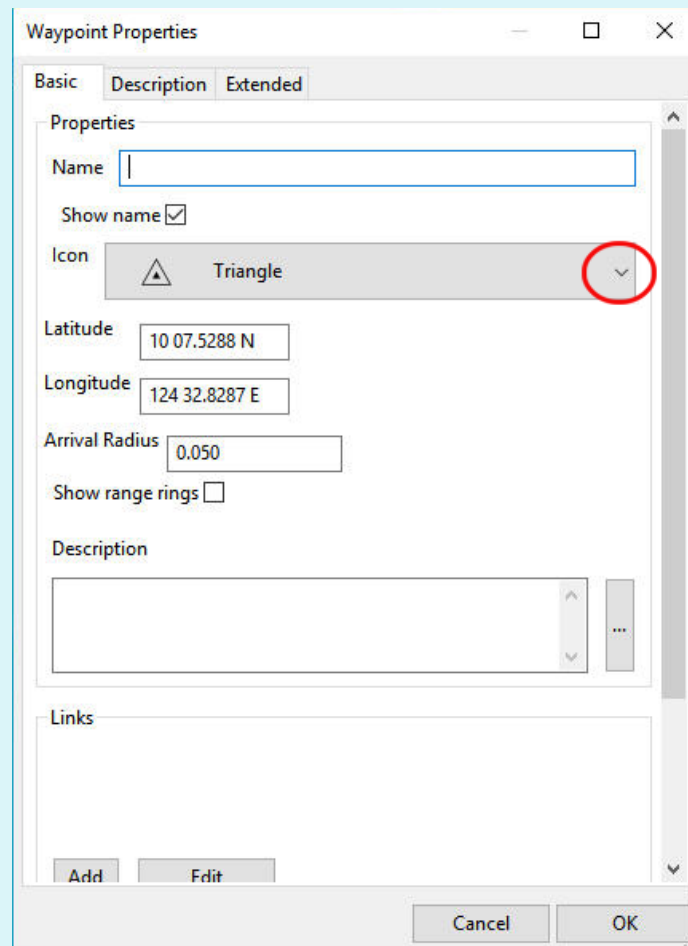
Right-click on the mark
(triangle) and click on
'Properties'



ANCHORAGES

Save an Anchorage Location

In addition to being hard to see the small triangle, a host of icons are available for marks that are easier to see and provide a better description. To view the available icons click on the elevator.



The image shows a 'Waypoint Properties' dialog box with three tabs: 'Basic', 'Description', and 'Extended'. The 'Basic' tab is selected. It contains several input fields and checkboxes. The 'Name' field is empty. The 'Show name' checkbox is checked. The 'Icon' field shows a triangle icon and the text 'Triangle', with a red circle highlighting a dropdown arrow on the right. The 'Latitude' field contains '10 07.5288 N' and the 'Longitude' field contains '124 32.8287 E'. The 'Arrival Radius' field contains '0.050'. The 'Show range rings' checkbox is unchecked. The 'Description' field is empty. The 'Links' field is empty. At the bottom, there are 'Add' and 'Edit' buttons, and 'Cancel' and 'OK' buttons.



Waypoint Properties

Basic Description Extended

Properties

Name

Show name ☒

Icon  Triangle 

Latitude

Longitude

Arrival Radius

Show range rings ☐

Description

Links

Add Edit

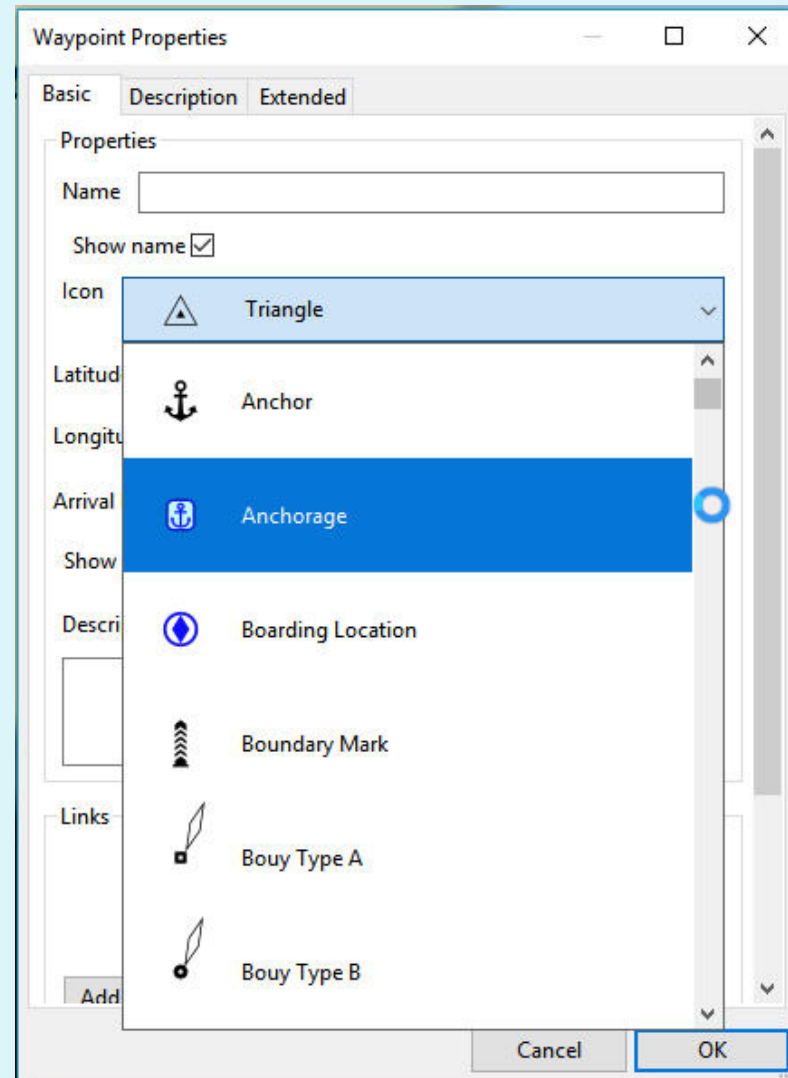
Cancel OK

ANCHORAGES

Save an Anchorage Location

Since this is an anchorage select the 'Anchorage' icon.

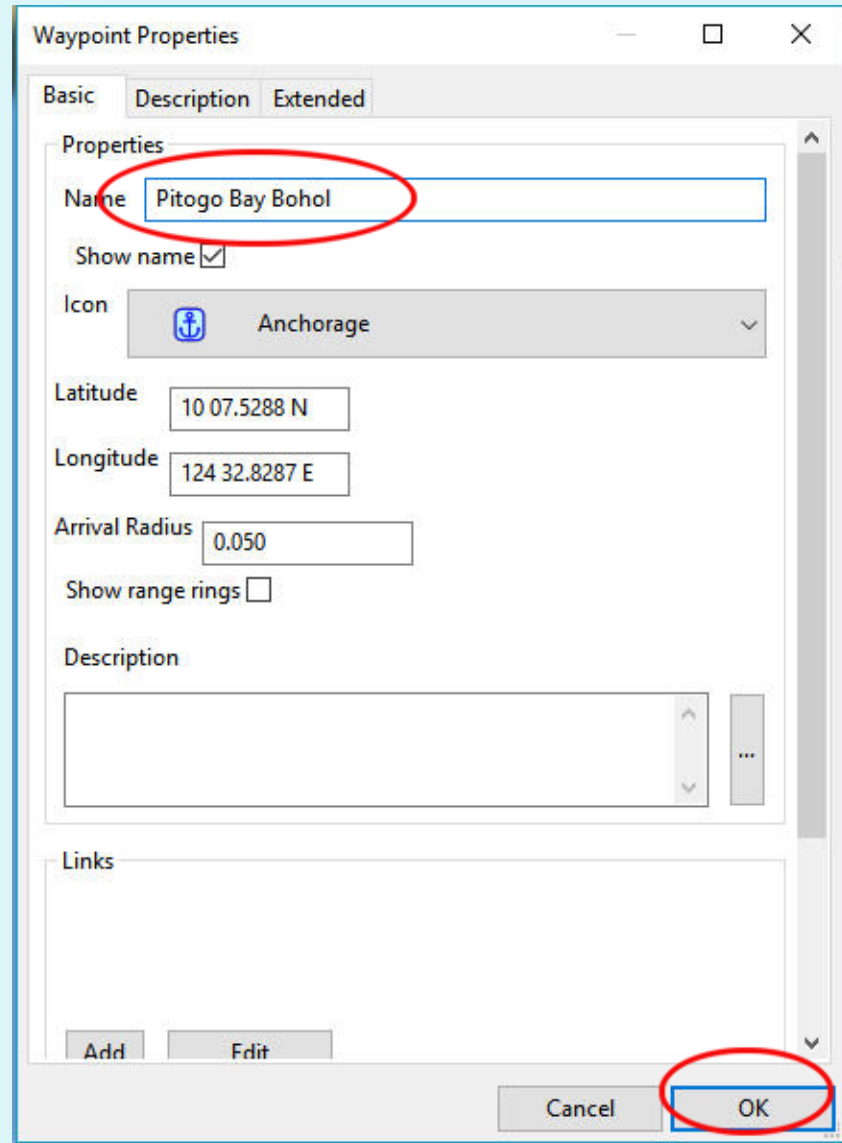
It's also a good idea to give the anchorage location a name.



ANCHORAGES

Save an Anchorage Location

Here I have entered a name to something easy to recognize in the future. When done click on 'OK'



The image shows a 'Waypoint Properties' dialog box with three tabs: 'Basic', 'Description', and 'Extended'. The 'Basic' tab is selected. In the 'Properties' section, the 'Name' field contains 'Pitogo Bay Bohol' and is circled in red. Below it, 'Show name' is checked. The 'Icon' dropdown shows an anchor icon and the text 'Anchorage'. The 'Latitude' field contains '10 07.5288 N' and the 'Longitude' field contains '124 32.8287 E'. The 'Arrival Radius' field contains '0.050' and 'Show range rings' is unchecked. The 'Description' section has a text area and a button with three dots. The 'Links' section is empty. At the bottom, there are 'Add' and 'Edit' buttons, and at the very bottom right, 'Cancel' and 'OK' buttons, with the 'OK' button circled in red.


Waypoint Properties

Basic Description Extended

Properties

Name Pitogo Bay Bohol

Show name ☒

Icon  Anchorage

Latitude 10 07.5288 N

Longitude 124 32.8287 E

Arrival Radius 0.050

Show range rings ☐

Description

Links

Add Edit

Cancel OK

ANCHORAGES

Save an Anchorage Location

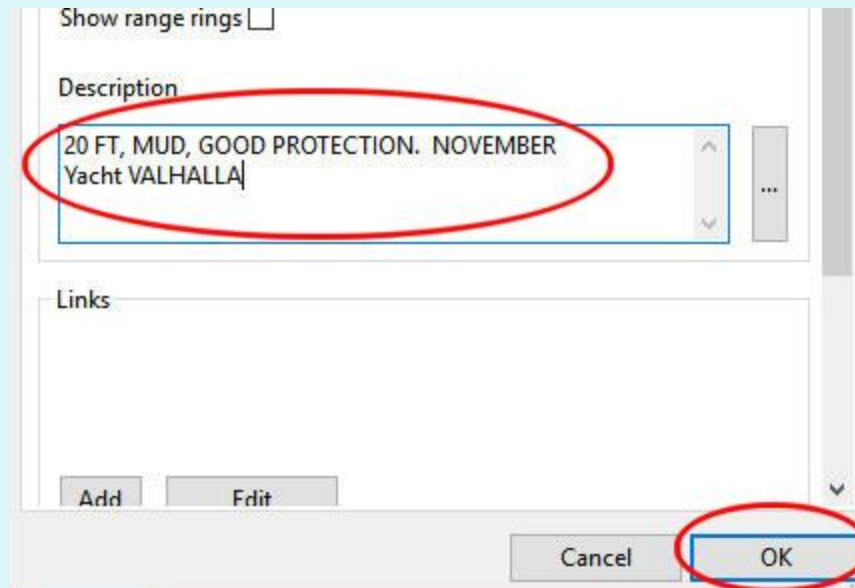
The anchorage is now created and displayed but **not saved!**



ANCHORAGES

Save an Anchorage Location

Prior to saving the anchorage location I suggest you add some information about it that can be useful to you in the future and also to any others you may share this information with. Go to the anchorage 'Properties' and enter the additional information in the 'Description' box.



The screenshot shows a dialog box titled "Anchorage Properties". At the top, there is a checkbox labeled "Show range rings" which is currently unchecked. Below this is a section labeled "Description" containing a text area with the text "20 FT, MUD, GOOD PROTECTION. NOVEMBER Yacht VALHALLA". This text area is circled in red. Below the "Description" section is a section labeled "Links" which is currently empty. At the bottom of the dialog box, there are three buttons: "Add", "Edit", and "OK". The "OK" button is circled in red. The "Add" and "Edit" buttons are disabled (grayed out).

ANCHORAGES

Save an Anchorage Location

As a minimum I suggest the depth, bottom composition and other useful information. The month of the year is helpful in monsoon locations. The name of the vessel maintains an audit trail.

Show range rings ☐

Description

20 FT, MUD, GOOD PROTECTION. NOVEMBER
Yacht VALHALLA

Links

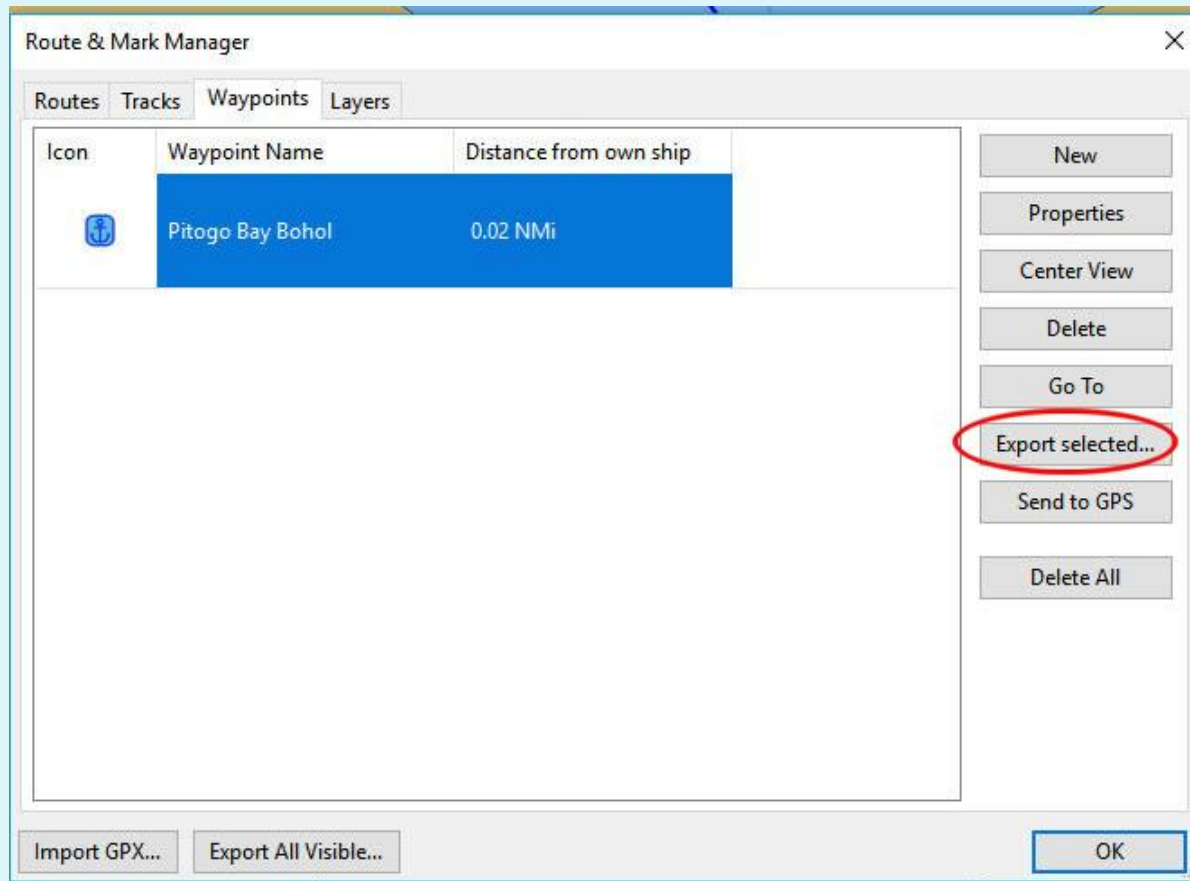
Add Edit

Cancel OK

ANCHORAGES

Save an Anchorage Location

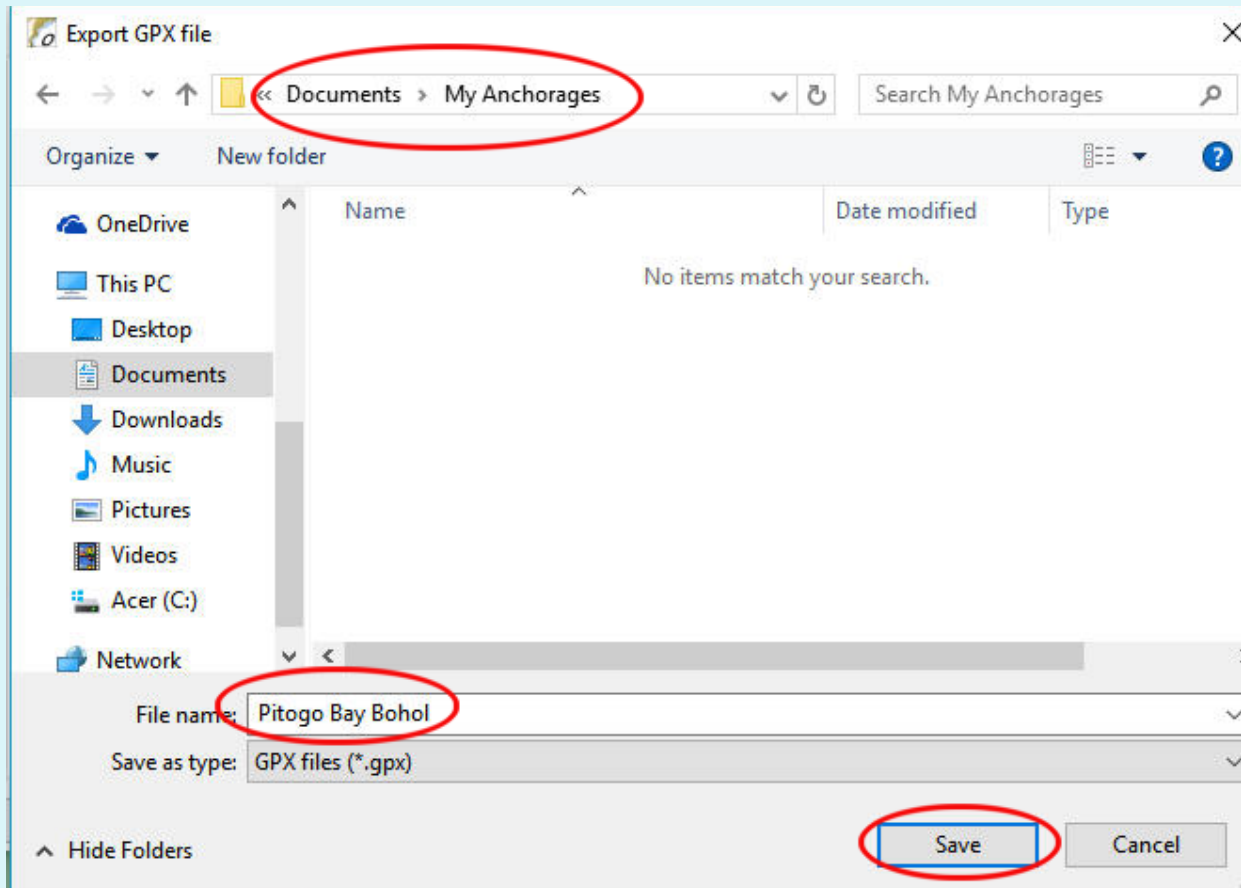
In 'Route & Mark Manager' highlight the anchorage and click on 'Export selected ...'



ANCHORAGES

Save an Anchorage Location

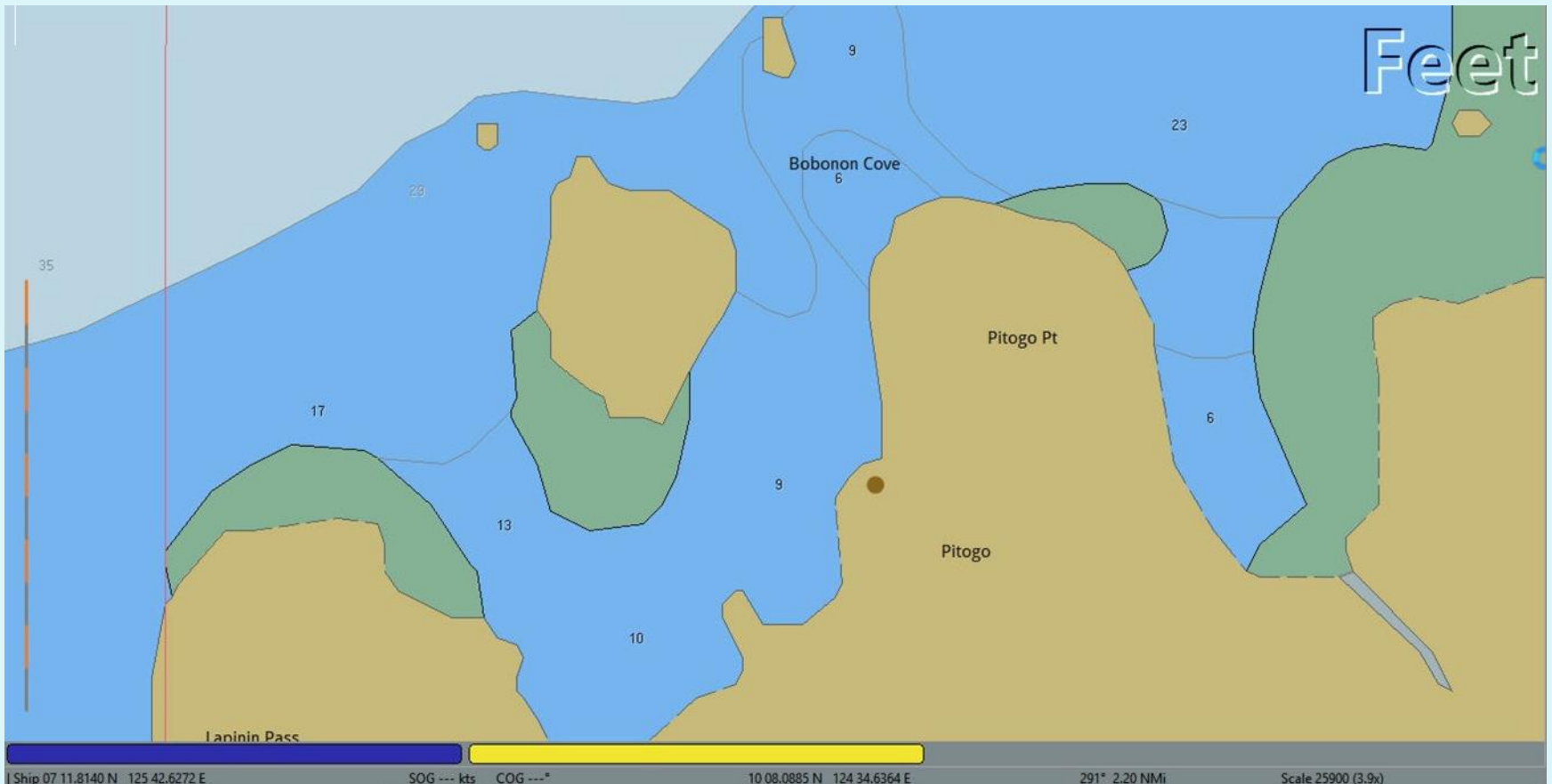
Navigate to where you save anchorages, check the file name for accuracy and click on 'Save'.



ANCHORAGES

Display a Saved Anchorage

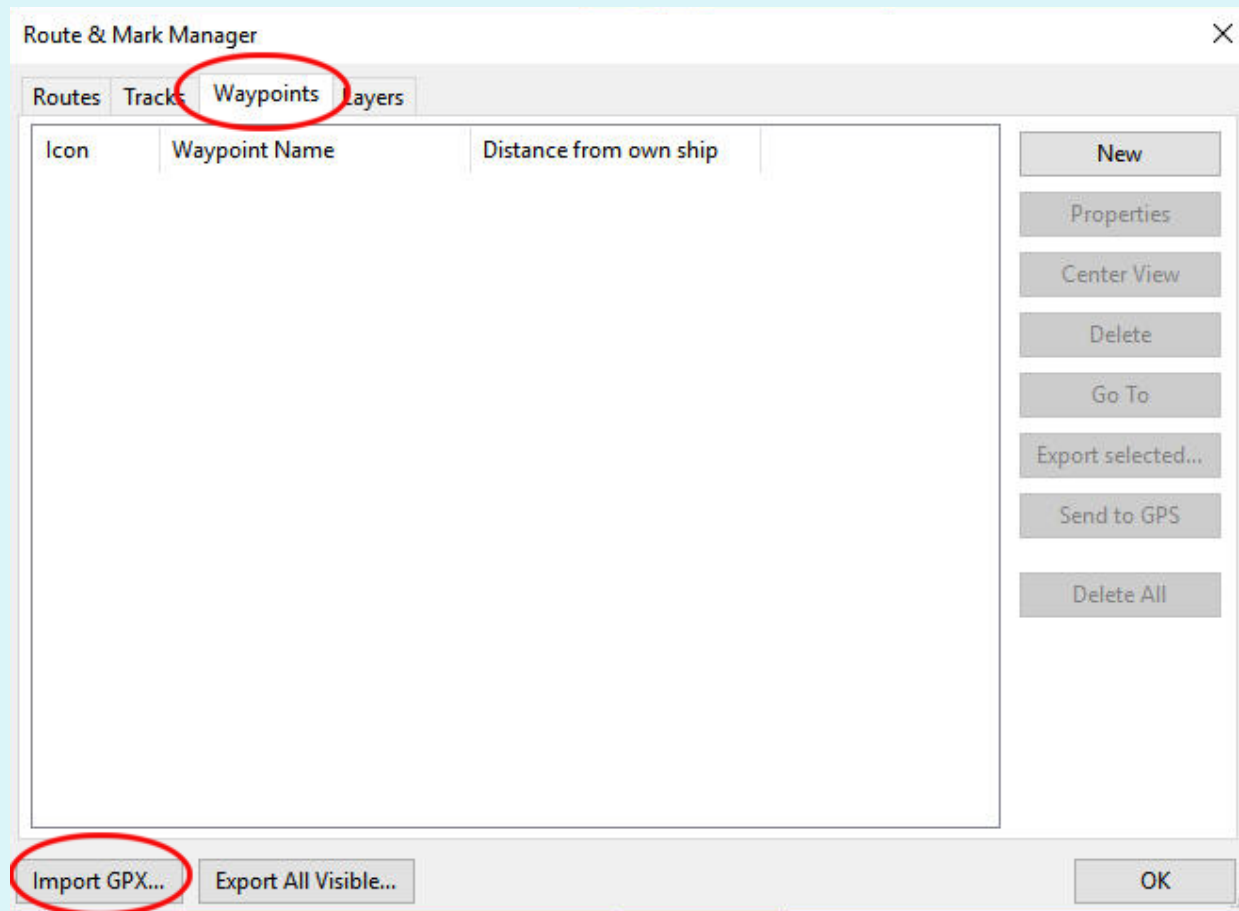
Here I wish to recall the previously saved anchorage.



ANCHORAGES

Display a Saved Anchorage

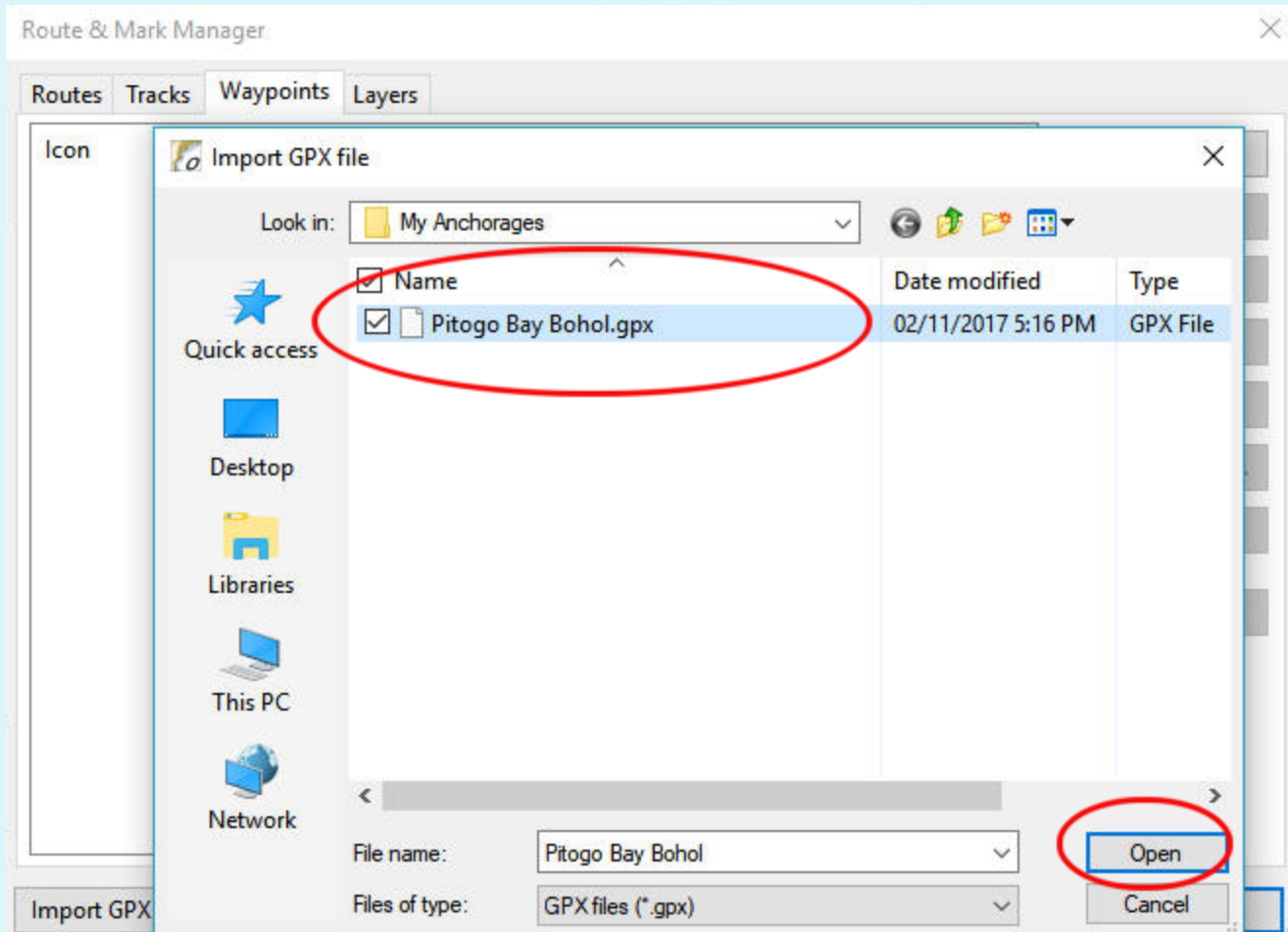
In 'Route & Mark Manager' select the 'Waypoints' tab then click on 'Import GPX ..'



ANCHORAGES

Display a Saved Anchorage

Navigate to your saved anchorages, select the desired anchorage and click on 'Open'.



ANCHORAGES

Display a Saved Anchorage

The saved anchorage is displayed.

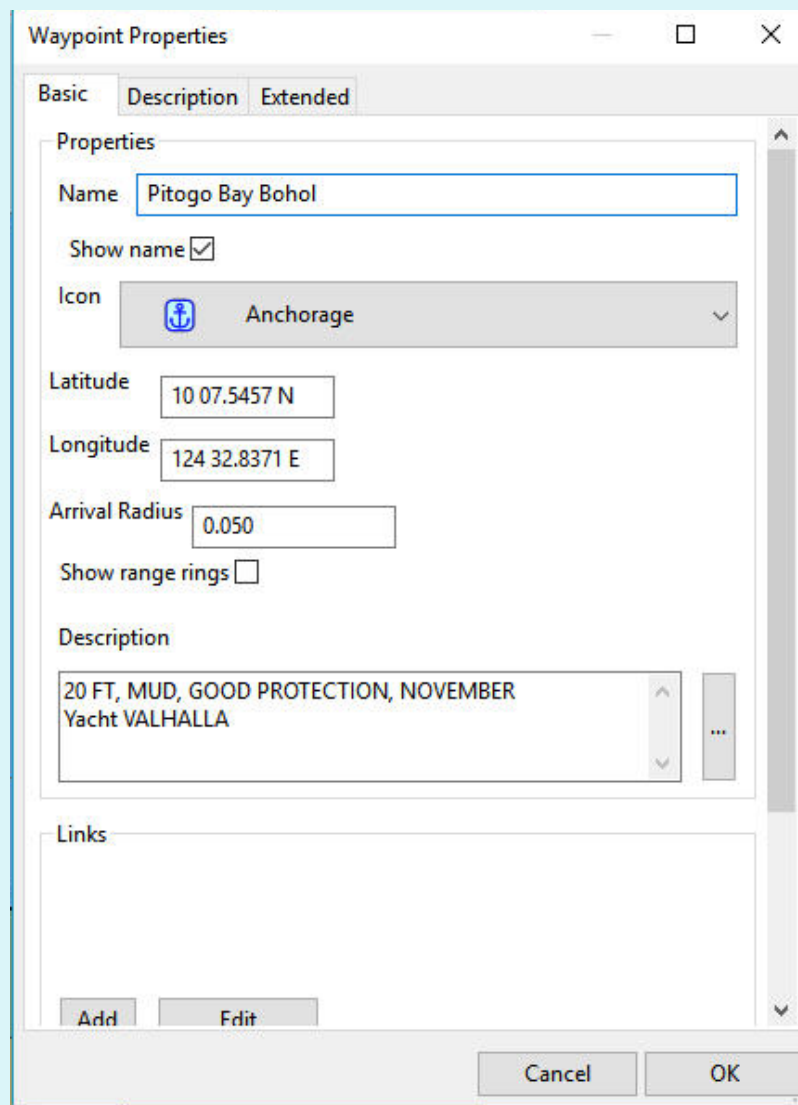


ANCHORAGES

Display a Saved Anchorage

To recall information about this anchorage, right-click on the icon and select 'Properties'.

The saved information is displayed.



The image shows a 'Waypoint Properties' dialog box with the 'Basic' tab selected. The 'Name' field contains 'Pitogo Bay Bohol'. The 'Show name' checkbox is checked. The 'Icon' dropdown menu is set to 'Anchorage', which is represented by an anchor icon. The 'Latitude' field shows '10 07.5457 N' and the 'Longitude' field shows '124 32.8371 E'. The 'Arrival Radius' field is set to '0.050'. The 'Show range rings' checkbox is unchecked. The 'Description' field contains the text '20 FT, MUD, GOOD PROTECTION, NOVEMBER Yacht VALHALLA'. At the bottom, there are 'Add' and 'Edit' buttons, and at the very bottom, 'Cancel' and 'OK' buttons.

Field	Value
Name	Pitogo Bay Bohol
Show name	<input checked="" type="checkbox"/>
Icon	Anchorage
Latitude	10 07.5457 N
Longitude	124 32.8371 E
Arrival Radius	0.050
Show range rings	<input type="checkbox"/>
Description	20 FT, MUD, GOOD PROTECTION, NOVEMBER Yacht VALHALLA

LAYERS

Why Layers? There are two types:

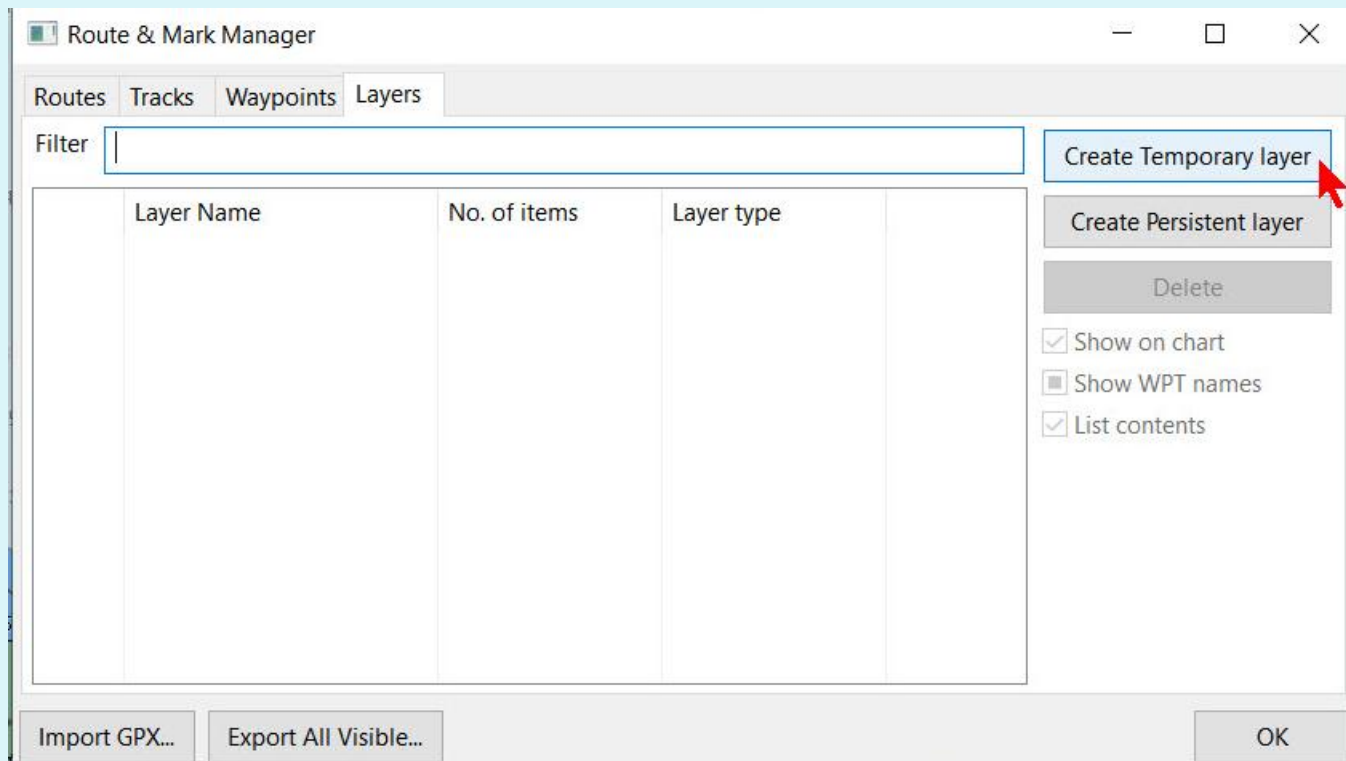
Temporary information during a session
that can be displayed at will (Temporary)

Permanent information in the program
that can be displayed at will (Persistent)

LAYERS

Temporary

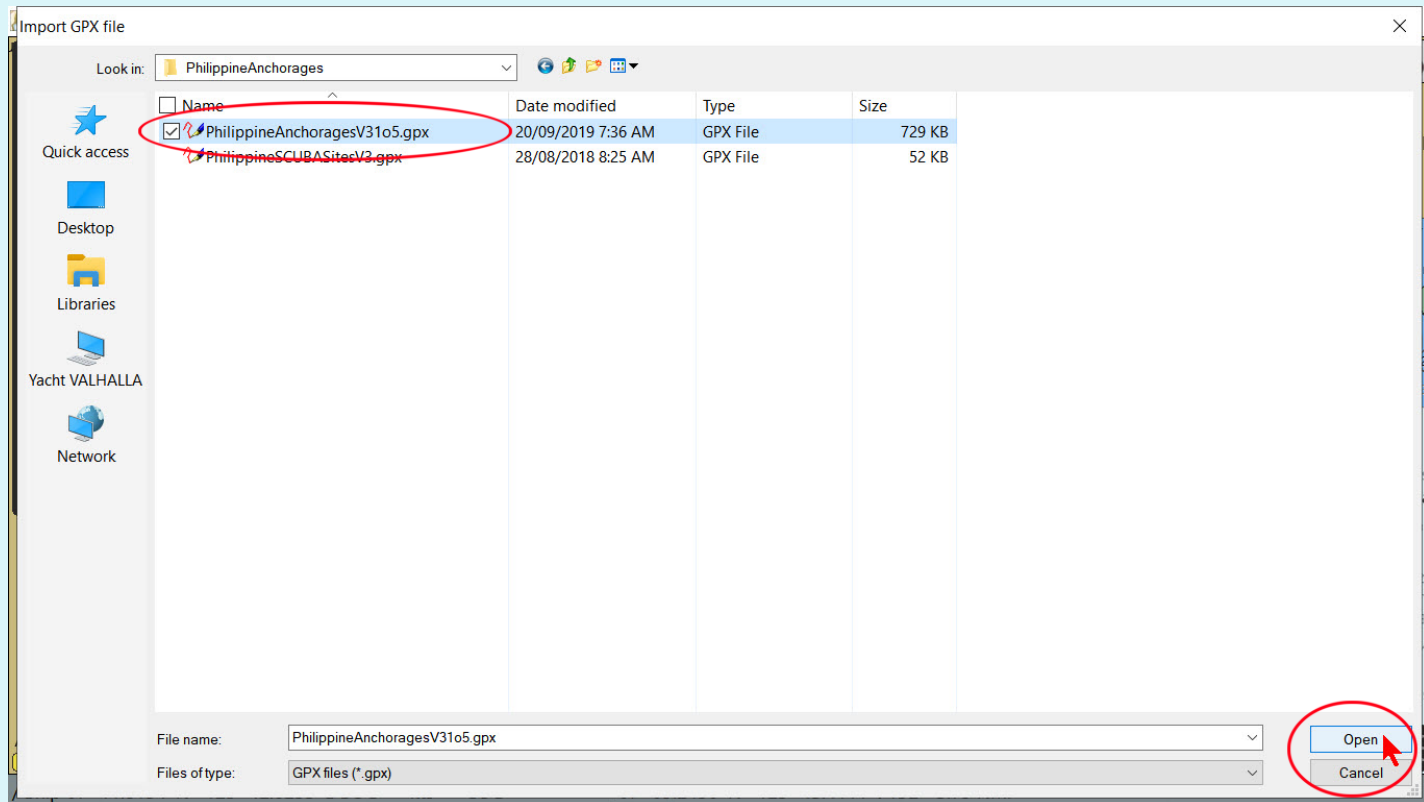
In the 'Route & Mark Manager' open the 'Layers' tab. Click on 'Temporary layer'.



LAYERS

Temporary

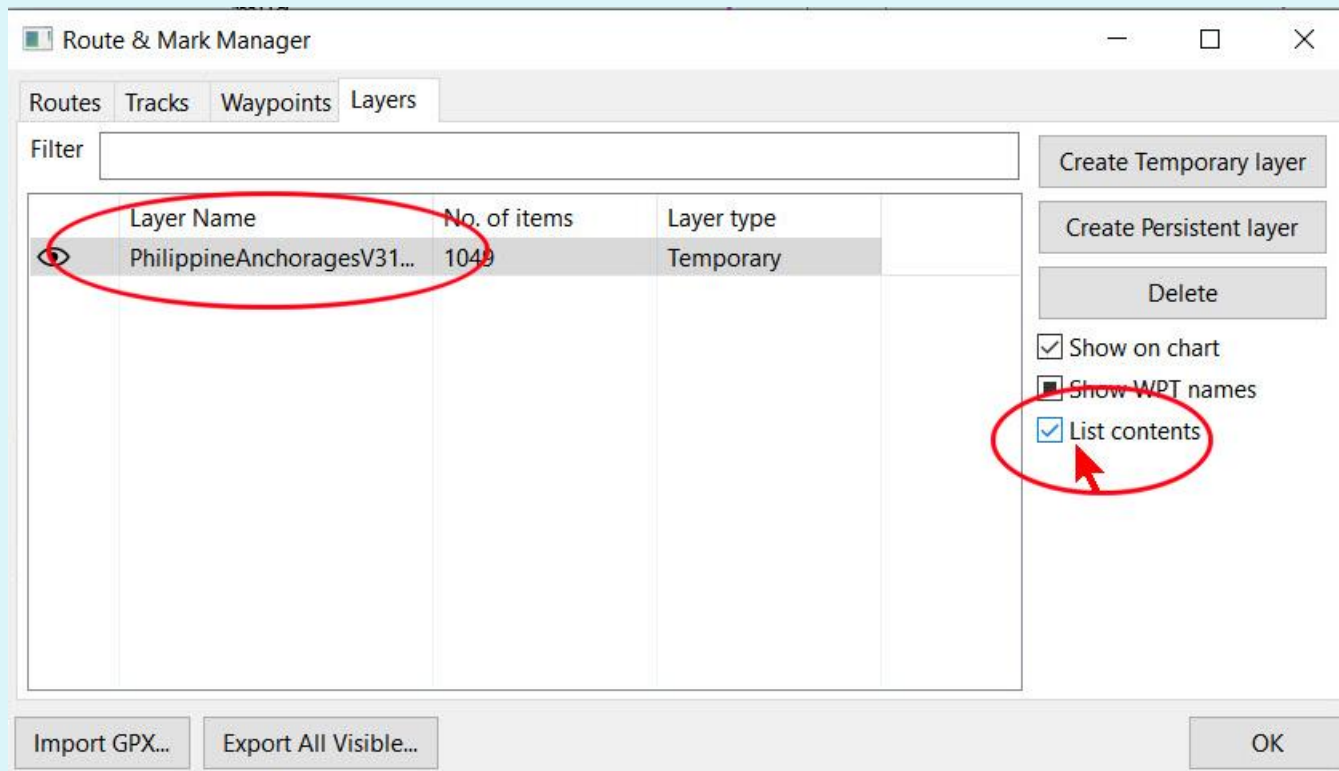
The 'Import GPX File' window opens. Navigate to the file you want to have in the temporary layer, highlight it and click on 'Open', in this case the 'Philippine AnchoragesV31o5'.



LAYERS

Temporary

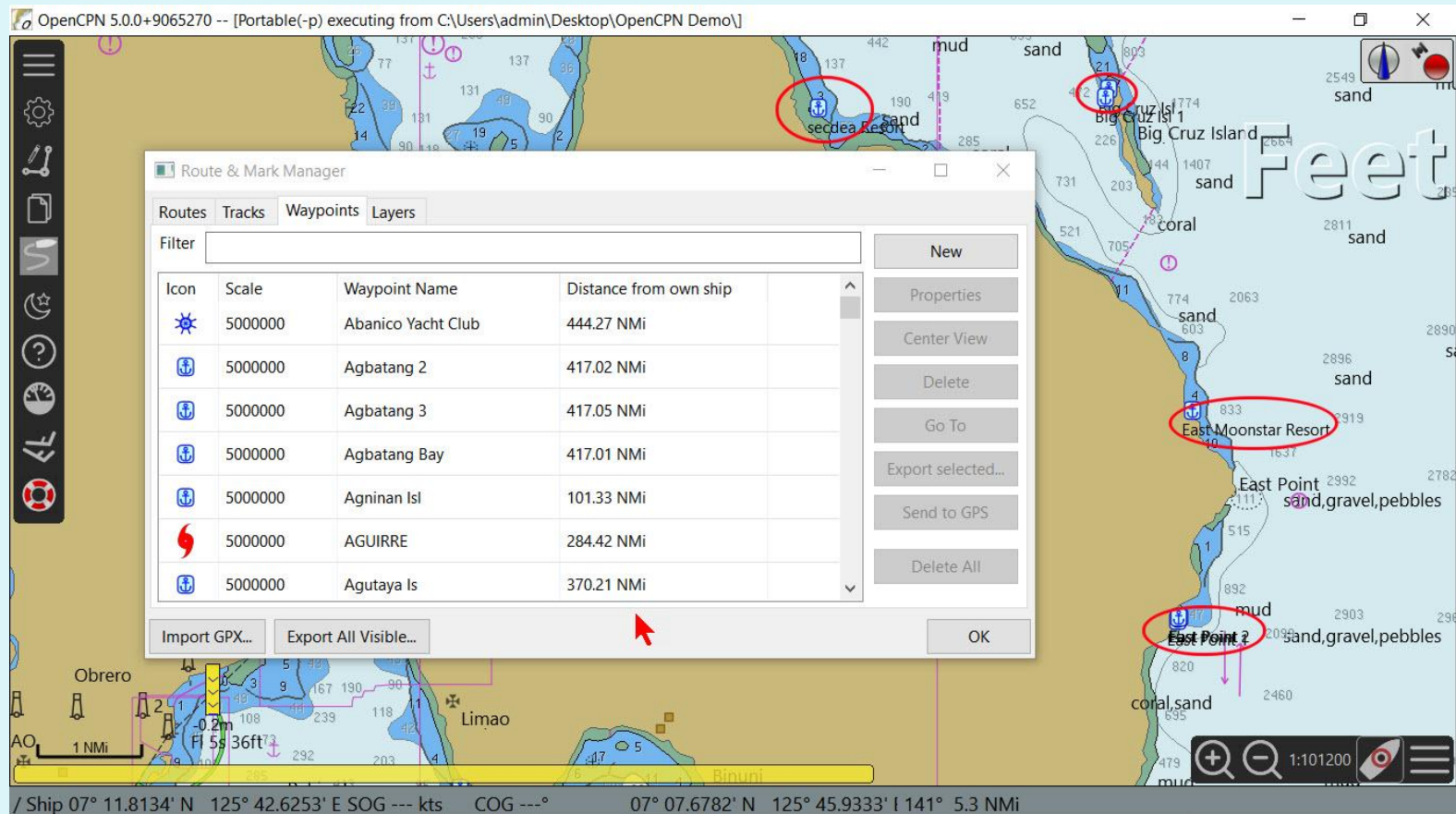
The file appears under the 'Layers' tab. Select the file and click on 'List contents' to display the anchorages under the 'Waypoints' tab.



LAYERS

Temporary

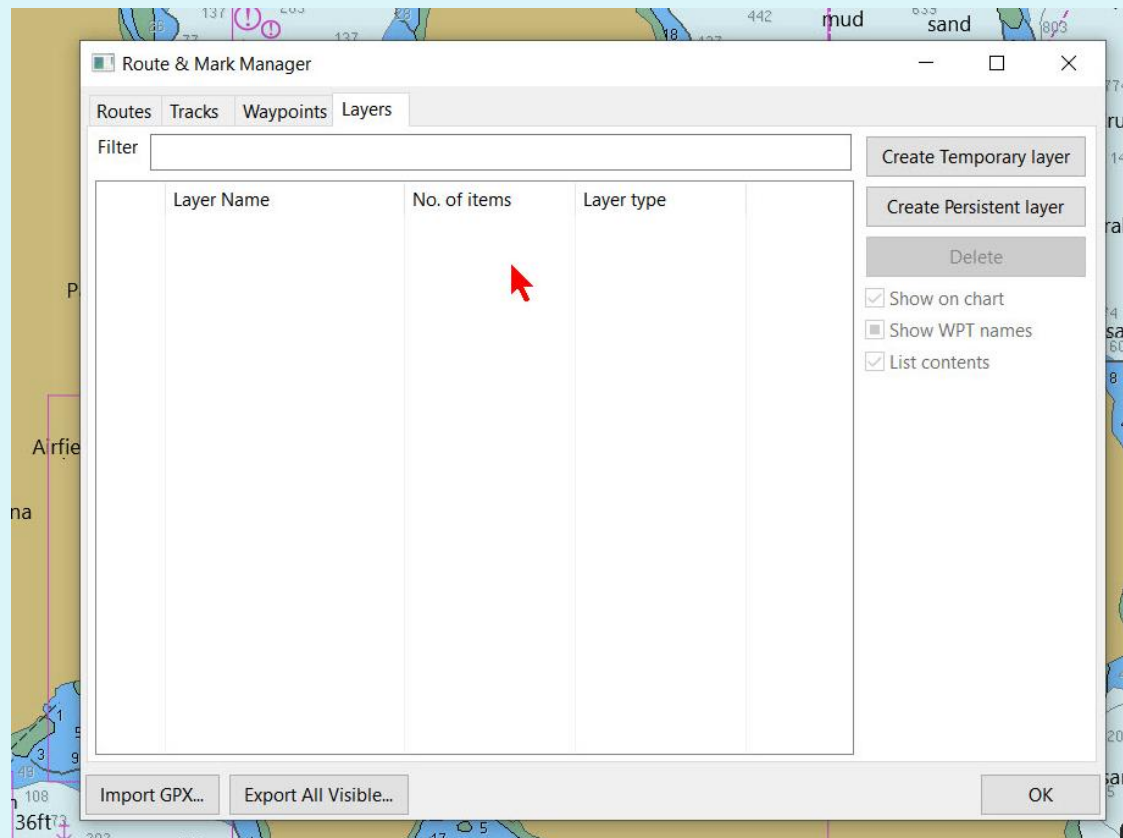
The anchorages appear under the 'Waypoints' tab.
The anchorage icons are displayed on the chart.



LAYERS

Temporary

If you close OpenCPN and reopen it the file is no longer there ... hence 'Temporary'.



LAYERS

Persistent

This is where the information you want to always be readily available when the program is running.
(It can be displayed or not with one click.)

Information such as anchorages, dangers, routes and the like. Though these could be imported from wherever stored on the computer as Temporary Layers, that can prove to be time-consuming and cumbersome.

Now for how to load up the 'Layers' folder.

LAYERS

Persistent

For layers to be *permanently* available they must be placed within the computer system.

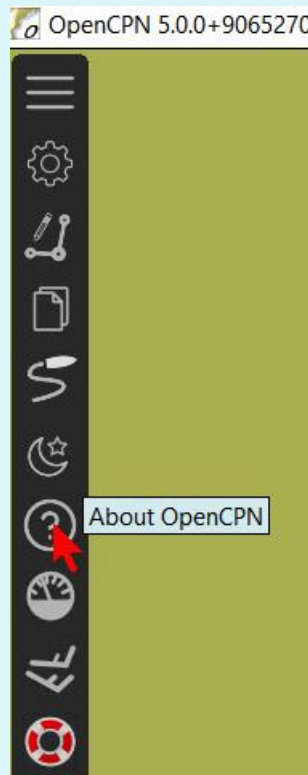
The location is dependent on the operating system.

The OpenCPN program helps you find the location !!

LAYERS

Persistent

On OpenCPN click on the 'About OpenCPN' icon as you did to find the manual.

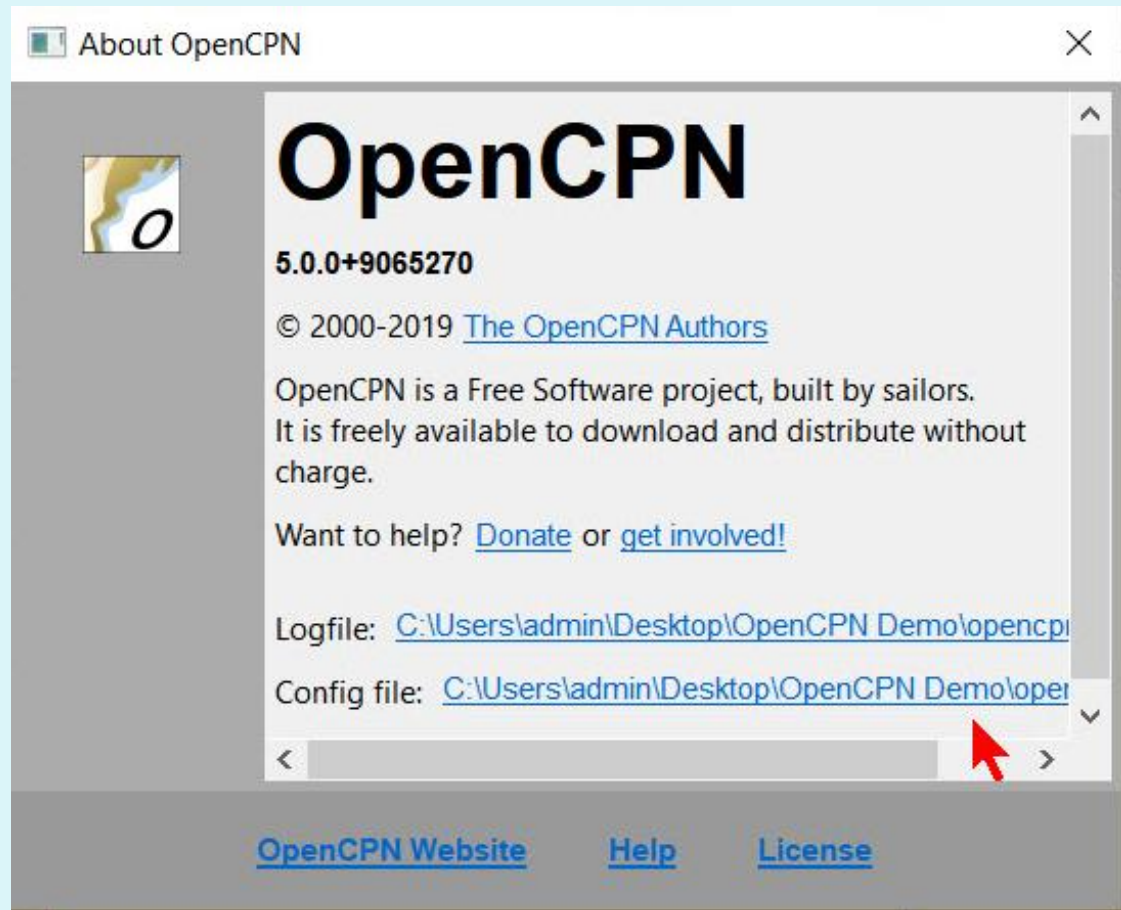


LAYERS

Persistent

The Layers folder will be installed at the OpenCPN 'Config file' location e.g. for W8-W10 at C:\Program Data\opencpn

NOTE: This is a 'hidden file' location!



LAYERS

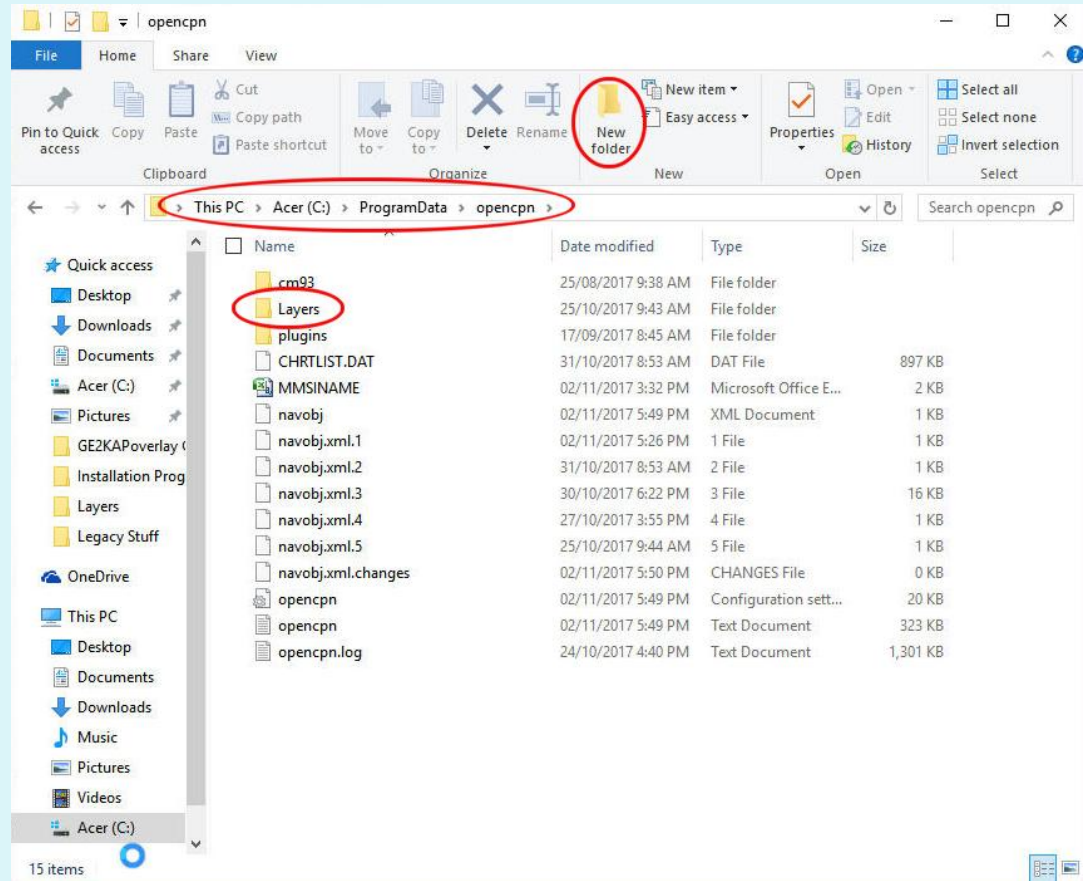
Persistent

Navigate to this file location

Create a new folder 'Layers' within the 'opencpn' folder.

It's only necessary to create this folder once.

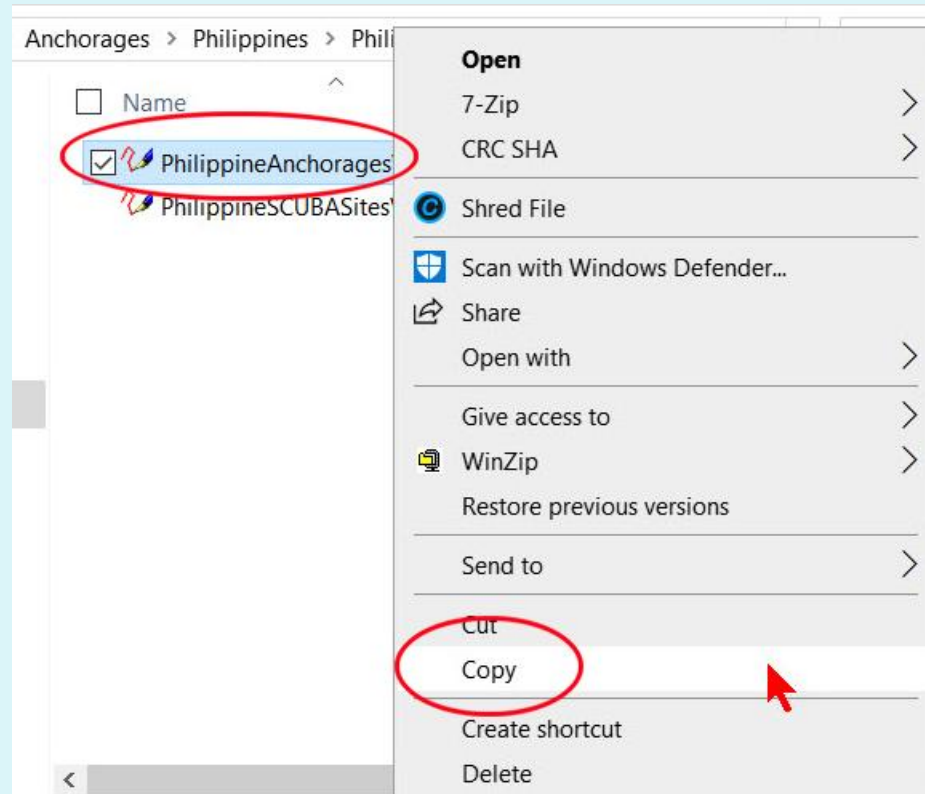
All future layer information will be placed in this folder.



LAYERS

Persistent

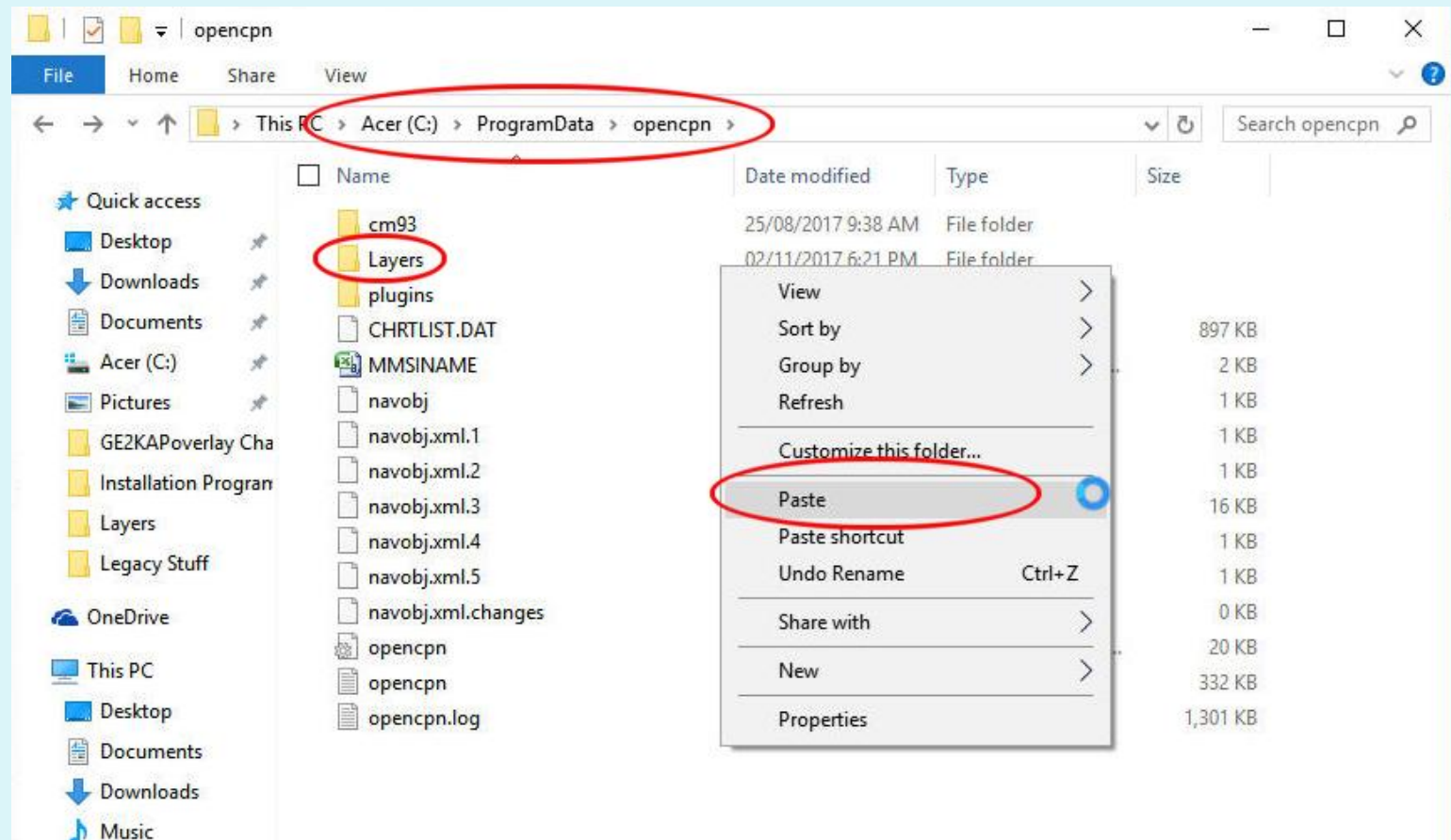
Here I have navigated to a .gpx file of 'Philippine AnchoragesV31o5, right-clicked and copied that file to the clipboard.



LAYERS

Persistent

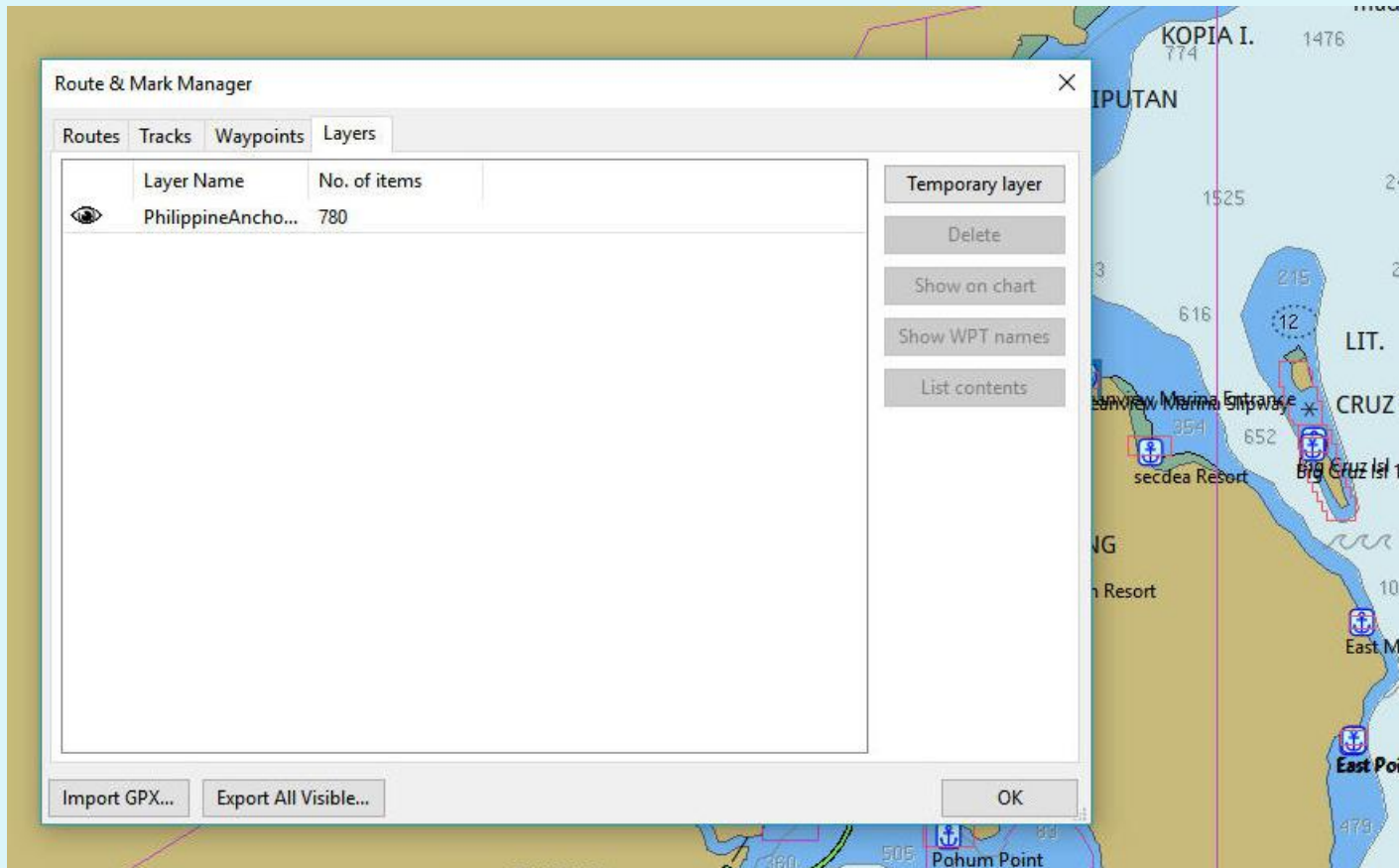
Return to the 'Layers' folder, right-click on it and paste the file into the folder.



LAYERS

Persistent

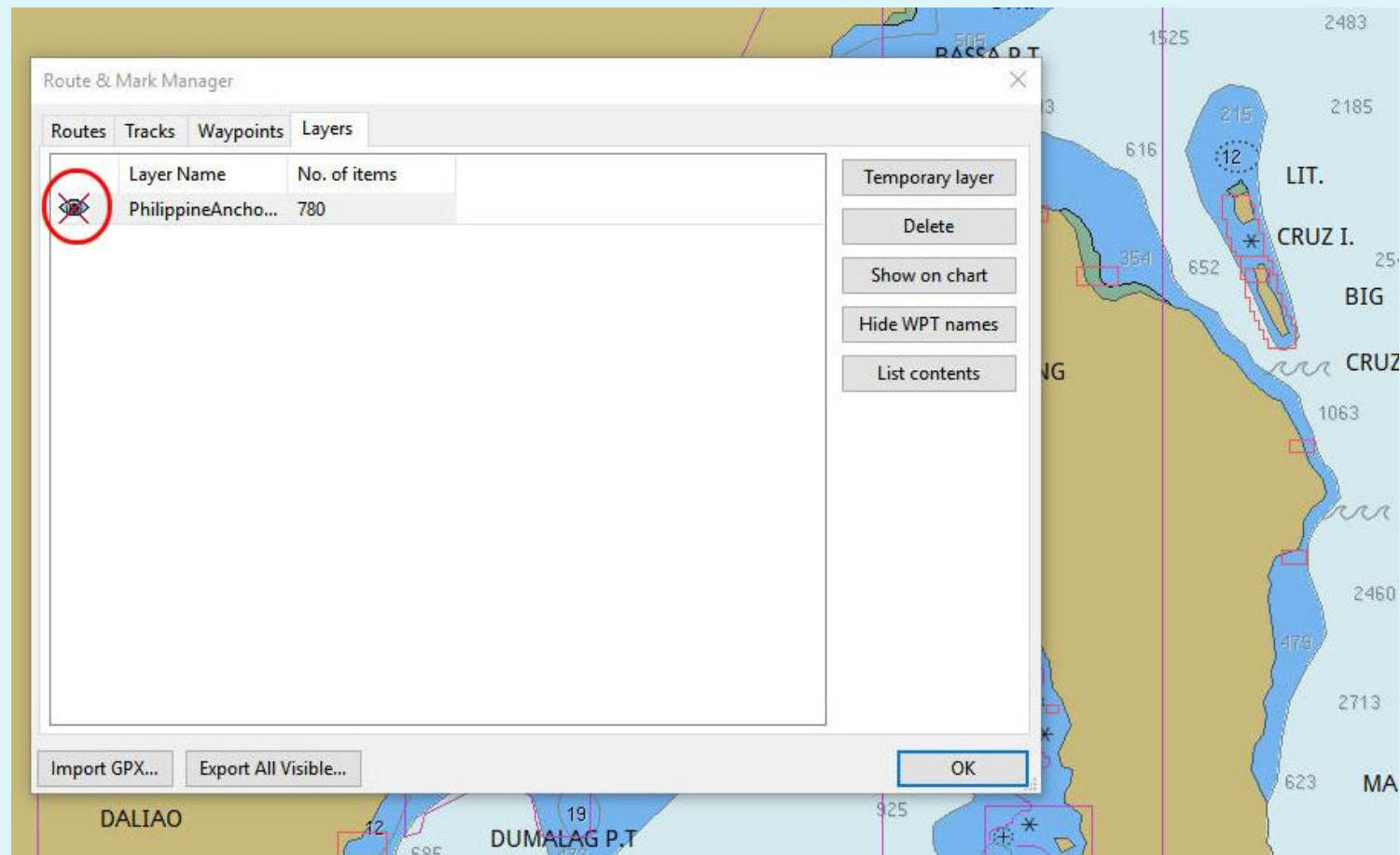
The anchorages are now shown on the 'Layers' tab of the 'Route & Mark Manager' but only after **restarting OpenCPN**.



LAYERS

Persistent

To remove the anchorages from the display, click on the 'eye' at the left of the file under the 'Layers' tab. (The 'one-click I said earlier')



LAYERS

POINTS TO REMEMBER

ANY .gpx file can be put in a layer.

This includes routes, tracks, anchorages and other information that has been saved in the .gpx format.

Waypoints in a layer are locked. This prevents the unplanned movement of a waypoint while clicking on the screen. Remember how to unlock them? And they cannot be edited.

Items in 'Layers' can be displayed or not with a single click

PLUGINS

Plugins Included With OpenCPN

Dashboard Plugin

Plugin to display navigation data.

Grib Weather Plugin.

Plugin to display Grib weather data files.

WMM Plugin

A plugin to display the magnetic variation, based on the World Magnetic Model.

Chart Downloader

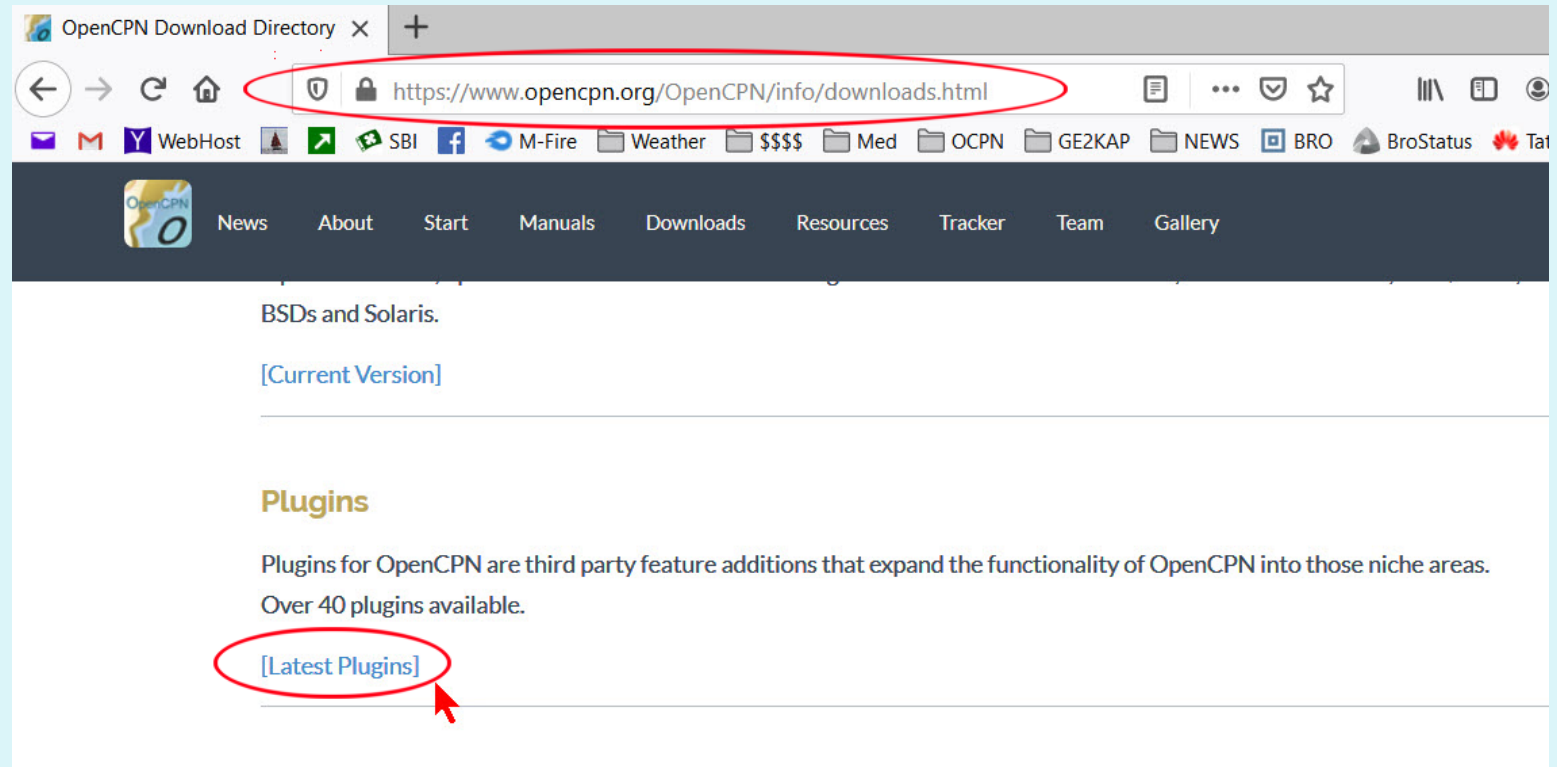
Manager for chart downloads of NOAA North America charts.

PLUGINS

Downloading Plugins

Go to the OpenCPN 'Downloads' page and click on [\[Latest Plugins\]](#)

(<http://opencpn.org/OpenCPN/info/downloads.html>)



PLUGINS

Downloading Plugins

The *installation programs* for available plugins can be downloaded from [there](https://www.opencpn.org/OpenCPN/info/downloadplugins.html) for Windows (and also for Linux and Mac OS X)



Exploring OpenCPN V5

BYE !



I hope this has been useful . It took several bottles of red wine to complete. I will blame any mistakes on the wine. Questions? Email: yachties@yahoo.com

*Terry Sargent
<http://yachtvalhalla.net>
1 November 2019*